8632

Access DB# 81051

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Kelechi Egwim Examiner #: 77020 Date: 11/25/02
Art Unit: 1713 Phone Number 30 6-5720 / Serial Number: 10/010283
Mail Box and Bldg/Room Location: CP3 9A11 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Stabilization of Aqueous emulsion polymer

Inventors (please provide full names): Natalie et al.

Earliest Priority Filing Date: 7/99

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for the reaction product in claim 26 in a polymer emulsion.

The possible reaction products are:

$$R(OG)_n(OP)_mOR'X_2$$

or

$$\left(R(OG)_n(OP)_mO\right)_2R'X$$

or

$$\left(R(OG)_n(OP)_mO\right)_3R'.$$ Search for each.

****

STAFF USE ONLY

Searcher: EJ
Searcher Phone #:
Searcher Location:
Date Searcher Picked Up:
Date Completed: 12-5-02
Searcher Prep & Review Time: 10
Clerical Prep Time:
Online Time: 115

Type of Search

NA Sequence (#)
AA Sequence (#)
Structure (#) ✓ (5) (subsets)
Bibliographic ✓ (and)
Litigation
Fulltext
Patent Family
Other

Vendors and cost where applicable

STN $547.29
Dialog
Questel/Orbit
DrLink
Lexis/Nexis
Sequence Systems
WWW/Internet
Other (specify)

PTO-1590 (8-01)

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=> file reg
FILE 'REGISTRY' ENTERED AT 10:53:43 ON 05 DEC 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:     3 DEC 2002  HIGHEST RN 475040-20-1
DICTIONARY FILE UPDATES:    3 DEC 2002  HIGHEST RN 475040-20-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d his

     (FILE 'HOME' ENTERED AT 09:22:33 ON 05 DEC 2002)

     FILE 'HCAPLUS' ENTERED AT 09:25:51 ON 05 DEC 2002
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L2           635 S KLIMA ?/AU
L3          5846 S HOPKINS ?/AU
L4          1239 S WIGGINS ?/AU
L5             1 S L1 AND L2 AND L3 AND L4
                 SEL L5 1 RN

     FILE 'REGISTRY' ENTERED AT 09:26:13 ON 05 DEC 2002
L6             5 S E1-E5
L7             1 S 106-89-8
L8         21605 S 106-89-8/CRN
                 SEL L6 1,2,4 RN
L9             3 S E6-E8
                 EDIT E6-E8 /BI /CRN
L10          135 S E6-E8
L11            0 S L8 AND L10

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L12        13239 S L7
L13         1085 S L9
L14           16 S L12 AND L13
L15       101612 S (EMULS? OR MICROEMULS? OR DISPERS? OR MICRODISPERS? OR
L16            4 S L14 AND L15
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L17      170564 S (AQ# OR AQUEOUS? OR WATER? OR H2O)(2A)(EMULS? OR MICROE
L18           3 S L14 AND L17
L19       46751 S (STABIL? OR STABL?)(2A)(EMULS? OR MICROEMULS? OR DISPER
L20           1 S L14 AND L19

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L21             STR
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L23             STR
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L25             SCR 2043
L26           2 S L21 AND L25
L27             SCR 963 AND 1700 AND 1707
L28           7 S L21 AND L25 AND L27
L29             SCR 963 AND 1700
L30          20 S (L21 OR (L22 AND (L23 OR L24))) AND L25 AND L29
L31        3215 S (L21 OR (L22 AND (L23 OR L24))) AND L25 AND L29 FUL
                SAV L31 EGW883/A

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L34             STR L32
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L36           0 S L34 SSS FUL SUB=L31
L37         319 S L31 AND 1/NC
                E OXIRANE/CN
L38           1 S E3
L39       21344 S 75-21-8/CRN
                E METHYLOXIRANE/CN
L40           1 S E3
L41       17754 S 75-56-9/CRN
L42           8 S L31 AND (L39 OR L41) AND 2/NC
L43         190 S L31 AND L39 AND L41 AND 3/NC
L44         198 S L42 OR L43

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L45         226 S (C H CL/ELF OR C H BR/ELF OR C H I/ELF) AND 2<X

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L46           0 S ALKANETRIYL?

     FILE 'HCAPLUS' ENTERED AT 10:10:25 ON 05 DEC 2002
L47          63 S ALKANETRIYL?

     FILE 'LREGISTRY' ENTERED AT 10:12:09 ON 05 DEC 2002

     FILE 'REGISTRY' ENTERED AT 10:12:41 ON 05 DEC 2002
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L48        21318 S (C H CL/ELF OR C H BR/ELF OR C H I/ELF) AND 2<X
L49            0 S L48 AND L31
L50        19563 S L48 NOT PMS/CI
L51        14457 S L50 NOT M/ELS
L52        11225 S L51 AND 1/NC

     FILE 'HCAPLUS' ENTERED AT 10:15:29 ON 05 DEC 2002
L53       101482 S L52
L54        12752 S L37
L55         1815 S L44
L56          129 S L53 AND (L54 OR L55)
L57        12889 S L52 (L) RCT/RL
L58          385 S L37 (L) RCT/RL
L59           48 S L44 (L) RCT/RL
L60            1 S L57 AND (L58 OR L59)
L61           18 S L56 AND (L15 OR L17 OR L19)
L62        42842 S (BASE# OR BASIC?)(2A)(CAT# OR CATALY?)
L63            0 S L56 AND L62
L64        11835 S (NAOH OR KOH OR OH OR HYDROXIDE#)(2A)(CAT# OR CATALY?)
L65         7861 S WILLIAMSON# OR ETHER#(2A)(SYN# OR SYNTH?)
L66            0 S L56 AND (L64 OR L65)
L67              QUE REACT? OR RXN#
L68           30 S L56 AND L67
L69            6 S L16 OR L18 OR L20 OR L60
L70           18 S L61 NOT L69
L71           24 S L68 NOT (L69 OR L70)
L72           11 S L14 NOT (L69 OR L70 OR L71)

     FILE 'REGISTRY' ENTERED AT 10:53:43 ON 05 DEC 2002

=> d l31 que stat
L21             STR

Ak@G1-OH          O-@Ak
 1   2   3       @6  @7


REP G1=(1-10) 6-1 7-3
NODE ATTRIBUTES:
CONNECT IS E1  RC AT   1
CONNECT IS E2  RC AT   7
DEFAULT MLEVEL IS ATOM
GGCAT   IS SAT  AT   1
GGCAT   IS SAT  AT   7
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M3 C  AT   1
ECOUNT  IS M2-X3 C  AT   7

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   5

STEREO ATTRIBUTES: NONE
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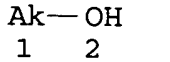
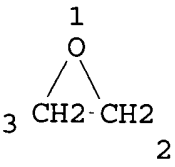
L22 STR



NODE ATTRIBUTES:
CONNECT IS E1 RC AT 1
DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 1
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M3 C AT 1

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 2

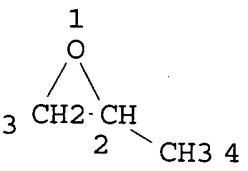
STEREO ATTRIBUTES: NONE
L23 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE
L24 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
L25 SCR 2043

L29 SCR 963 AND 1700
L31 3215 SEA FILE=REGISTRY SSS FUL (L21 OR (L22 AND (L23 OR L24))) AND L25 AND L29

100.0% PROCESSED 228865 ITERATIONS 3215 ANSWERS
SEARCH TIME: 00.00.07

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FILE 'HCAPLUS' ENTERED AT 10:56:38 ON 05 DEC 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 5 Dec 2002 VOL 137 ISS 23
FILE LAST UPDATED: 3 Dec 2002 (20021203/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d l69 1-6 cbib abs hitstr hitind

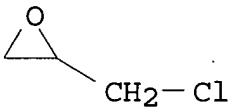
L69 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2002 ACS
2002:237363 Document No. 136:263994 **Stabilization** of **aqueous emulsion polymers**. Natale, Marcie; Klima, Rudolph; Hopkins, Thomas; Wiggins, Michael (Cognis Corporation, USA). U.S. US 6362259 B1 20020326, 9 pp. (English). CODEN: USXXAM. APPLICATION: US 1999-363555 19990729.

AB An **emulsion polymer** compn. contains an **emulsion stabilizing** effective quantity of product consisting essentially of the base catalyzed reaction of (A) an epihalohydrin and (B) at least one compd. R(OE)n(OP)mOH, wherein R is a satd. or unsatd. org. group having from 3 to 22 carbon atoms. n is a no. of from 1 to 50, m is a no. from 0 to 10, EO represents an ethyleneoxy group, and OP represents a propyleneoxy group, wherein

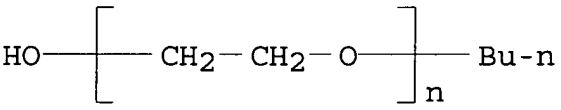
the mole ratio of components (A) to component (B) is from about 0.60:1 to about 2:1. A reaction product of epichlorohydrin and ethoxylated decyl alc. was used to stabilize a Bu acrylate-vinyl acetate copolymer.

IT **106-89-8DP**, Epichlorohydrin, reaction products with alkoxylated alcs. **9004-77-7DP**, Polyethylene glycol monobutyl ether, reaction products with epichlorohydrin **26183-52-8DP**, Ethoxylated decyl alcohol, reaction products with epichlorohydrin **27252-75-1DP**, Polyethylene glycol monooctyl ether, reaction products with epichlorohydrin
(**stabilization** of **aq. emulsion polymers**)

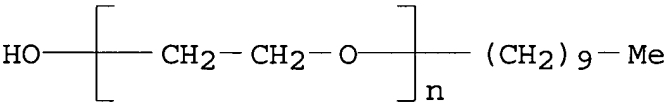
RN 106-89-8 HCAPLUS
CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



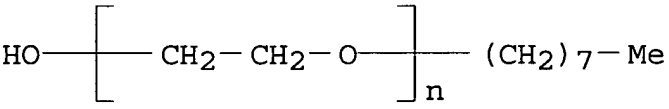
RN 9004-77-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 26183-52-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 27252-75-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

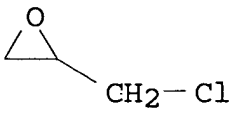


IC ICM C08K005-06
ICS C08K005-1515
NCL 524114000
CC 37-6 (Plastics Manufacture and Processing)
ST **aq emulsion polymer stabilization**
IT **Emulsifying** agents
Emulsions
(**stabilization** of **aq. emulsion polymers**)
IT 25067-01-0P, Butyl Acrylate-Vinyl Acetate copolymer
(**stabilization** of **aq. emulsion polymers**)
IT **106-89-8DP**, Epichlorohydrin, reaction products with alkoxylated alcs. **9004-77-7DP**, Polyethylene glycol monobutyl ether, reaction products with epichlorohydrin **26183-52-8DP**, Ethoxylated decyl alcohol, reaction products with epichlorohydrin **27252-75-1DP**, Polyethylene glycol monooctyl ether, reaction products with epichlorohydrin
(**stabilization** of **aq. emulsion polymers**)

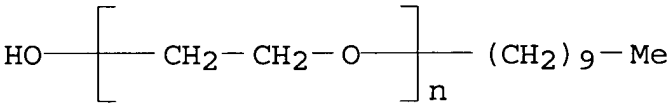
L69 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2002 ACS
2001:676845 Document No. 135:228259 Branched polymer defoamers for pigment dispersants. Breindel, Kenneth; Brown, David W. (Cognis Corporation, USA). PCT Int. Appl. WO 2001066629 A1 20010913, 21 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US7552 20010309. PRIORITY: US 2000-PV188091 20000309; US 2001-801509 20010308.

AB The compn., useful in water-based coatings, comprises (A) a pigment dispersant; and (B) a branched polymer defoamer obtained by reaction of (a) a linking agent RY3, wherein each Y is a halogen atom or one Y is halogen atom and two Y groups together represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R group to form an epoxy group, and R is C3-10 alkanetriyl, and (b) .gtoreq.1 compd. R1X(EO)n(PO)m(BO)pZ (R1 = (un)substituted satd. or unsatd., C4-36 org. group; X = O, S, NR2; R2 = H, C1-4 alkyl; Z = H, NHR2, SH; n = 0-100; m = 0-50; p = 0-50; n + m + p .gtoreq.1; EO = residue of ethylene oxide; PO = residue of propylene oxide; BO = residue of butylene oxide). Thus, 100 mL 1% aq. soln. of Tamol 731 (diisobutylene-maleic anhydride **copolymer** pigment **dispersant**) was mixed with 1 drop of reaction product of epichlorohydrin and decyl alc. 4EO in 1:1 epoxy : OH ratio to give a clear soln., 1 g of which was added to 99 mL water and hand shaken, showing no stable foam.

IT **106-89-8DP**, Epichlorohydrin, reaction products with polyethylene glycol monodecyl ether **26183-52-8DP**, Polyethylene glycol monodecyl ether, reaction products with epichlorohydrin
(defoamers; branched polymer defoamers for pigment dispersants)
RN 106-89-8 HCAPLUS
CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



RN 26183-52-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM C08K005-06
CC 42-5 (Coatings, Inks, and Related Products)
ST branched **polymer** defoamer pigment **dispersant** coating; epichlorohydrin polyoxyethylene decyl ether reaction defoamer; diisobutylene maleic anhydride **copolymer** pigment **dispersant**
IT **106-89-8DP**, Epichlorohydrin, reaction products with polyethylene glycol monodecyl ether 9002-92-0DP, Polyethylene glycol monododecyl ether, reaction products with epichlorohydrin 9016-45-9P, Polyethylene glycol monononylphenol ether **26183-52-8DP**, Polyethylene glycol monodecyl ether, reaction products with epichlorohydrin
(defoamers; branched polymer defoamers for pigment dispersants)
IT 31051-58-8, Maleic anhydride-methacrylic acid-styrene **copolymer** 37199-81-8, TAMOL 731
(pigment **dispersants**; branched **polymer** defoamers for pigment dispersants)

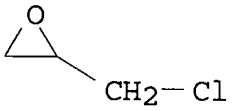
L69 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2002 ACS
2001:25785 Document No. 134:87944 Demulsifiers for separating oil and water mixtures. Lindert, Andreas; Wiggins, Michael S. (Henkel Corporation, USA). U.S. US 6172123 B1 20010109, 5 pp. (English). CODEN: USXXAM. APPLICATION: US 1999-364417 19990730.
AB A method for preventing or breaking oil and H2O mixts. comprises adding to emulsion a branched reaction product of (A) linking compds. R1X3 (R1 = C3-10 alkanetriyl; X = halo, or 1 X group = halo and 2 X groups with 2 adjacent C atoms in R1 and an O atom form an

epoxy group), preferably epichlorohydrin, (B) (alkoxylated) alcs. R2(OA)nOH (R2 = C3-36 alkyl; OA = CH2CH2O, CH2CHMeO, CH2CHEtO; n = 1-100), and/or (alkoxylated) aliph. amines R2(OA)nNH2 (R2, OA, n as above), and, optionally other polyols and polyamines. The branched products are low-foaming surfactants which are highly effective when used alone as demulsifiers esp. in preventing or breaking the interlayer present between oil and H2O layers obtained in the recovery of petroleum crude oil from underground sources. For example, adding 0.01% of an epichlorohydrin reaction product with ethoxylated (4 EO) decyl alc. to **aq**. diesel fuel **emulsion** caused sepn. into 2 distinct layers within 1 min.

IT **106-89-8D**, Epichlorohydrin, reaction products with ethoxylated decyl alc. **26183-52-8D**, Polyethylene glycol decyl ether, reaction products with epichlorohydrin (low-foam surfactants as demulsifiers for sepg. oil and water mixts.)

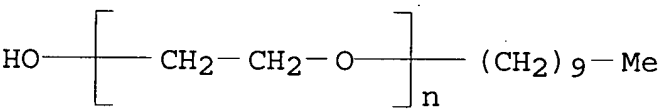
RN 106-89-8 HCAPLUS

CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



RN 26183-52-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM B01D017-05

NCL 516179000

CC 46-4 (Surface Active Agents and Detergents)

ST oil **water emulsion** sepn low foam surfactant demulsifier; diesel oil emulsion breaking ethoxylated decyl alc epichlorohydrin product; epichlorohydrin ethoxylated decyl alc product demulsifier aq diesel oil

IT **106-89-8D**, Epichlorohydrin, reaction products with ethoxylated decyl alc. **26183-52-8D**, Polyethylene glycol decyl ether, reaction products with epichlorohydrin (low-foam surfactants as demulsifiers for sepg. oil and water mixts.)

L69 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS

1999:763948 Document No. 132:23832 Antistatic lubricant composition and method of making same. Wiggins, Michael; Incorvia, Michael J.;

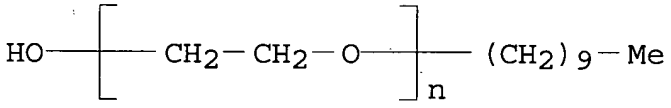
Fischer, Stephen A. (Henkel Corporation, USA). PCT Int. Appl. WO 9961169 A1 19991202, 26 pp. DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1999-US10458 19990525. PRIORITY: US 1998-85134 19980526.

AB A process for providing a substrate with antistatic and lubricating properties by contacting the substrate with a water-sol. or **water-dispersible polymer** compn. having hydrophobic and hydrophilic properties. The compn. comprises polyethers obtained from ethoxylated or ethoxylated-propoxylated fatty alcs. having a terminal hydrocarbon chain length of at least one carbon.

IT **26183-52-8**, Polyethylene glycol decyl ether (Trycol 5950; ethoxylated and propoxylated fatty alc.-based antistatic lubricant compn. for textiles and plastics and method of making same)

RN 26183-52-8 HCAPLUS

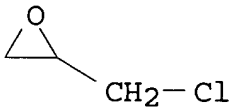
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **106-89-8**, reactions **9004-77-7**, Polyethylene glycol monobutyl ether (ethoxylated and propoxylated fatty alc.-based antistatic lubricant compn. for textiles and plastics and method of making same)

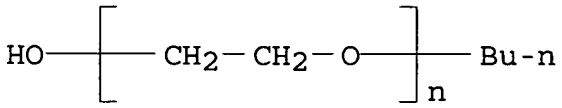
RN 106-89-8 HCAPLUS

CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



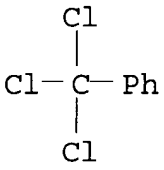
RN 9004-77-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

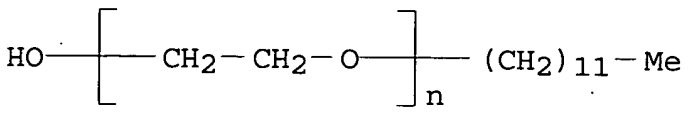


IC ICM B05D003-12
ICS B32B027-00; B32B027-06; B32B027-32; B32B027-36
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 38
IT **26183-52-8**, Polyethylene glycol decyl ether
(Trycol 5950; ethoxylated and propoxylated fatty alc.-based antistatic lubricant compn. for textiles and plastics and method of making same)
IT **106-89-8**, reactions **9004-77-7**, Polyethylene glycol monobutyl ether
(ethoxylated and propoxylated fatty alc.-based antistatic lubricant compn. for textiles and plastics and method of making same)

L69 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS
1976:4596 Document No. 84:4596 Applications of surfactants to synthetic organic chemistry. Menger, F. M.; Rhee, J. U.; Rhee, H. K. (Dep. Chem., Emory Univ., Atlanta, Ga., USA). J. Org. Chem., 40(25), 3803-5 (English) 1975. CODEN: JOCEAH.
AB Surfactant additives can give higher yields and shorter reactions times in reactions of water-insol. org. liqs. with aq. reagents. Piperonal was oxidized to piperonylic acid and PhCCl3 was hydrolyzed to benzoic acid ion media contg. quaternary ammonium bromide and Brij 35.
IT **98-07-7**
(hydrolysis of, surfactants as solubilization agents in)
RN 98-07-7 HCAPLUS
CN Benzene, (trichloromethyl)- (9CI) (CA INDEX NAME)



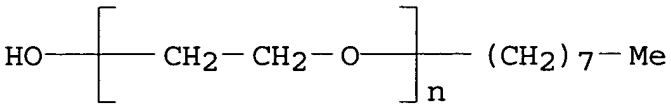
IT **9002-92-0**
(solubilization agent for oxidn. of piperonal and hydrolysis of benzylidyne trichloride)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



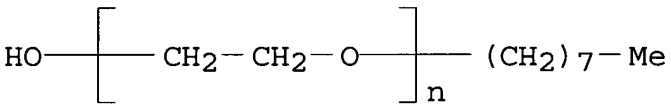
CC 25-17 (Noncondensed Aromatic Compounds)
Section cross-reference(s): 46
IT **98-07-7**
(hydrolysis of, surfactants as solubilization agents in)
IT 57-09-0 1643-19-2 **9002-92-0**
(solubilization agent for oxidn. of piperonal and hydrolysis of benzylidyne trichloride)

L69 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS
1974:427077 Document No. 81:27077 Acrylonitrile copolymer. Sato, Hideo; Ueda, Takeshi (Asahi Chemical Industry Co., Ltd.). Japan. JP 48033993 B4 19731018 Showa, 9 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 1970-74540 19700827.
AB Antistatic fibers are prepd. by spinning copolymers of acrylonitrile with CH2:C(R1)CO2CH2CH(OH)CH2(OCH2CH2)nOR2 (I, R1 = H, Me;R2 = n-alkyl) or CH2:C(R3)CO2CH2CH(OH)CH2O2CZCO(OCH2CH2)nR4 (II, R3 = H, Me; R4 = Cl, CN, alkoxy, or alkanoylamino; Z = (CH2)4, CH2CH2, or o-C6H4). Thus, 1 mole polyethylene glycol mono-n-octyl ether [**27252-75-1**] (d.p. 15) was condensed with 1.05 moles epichlorohydrin [**106-89-8**] in the presence of BF3.OEt2 and the product was treated either directly as the chlorohydrin ether or after cyclization to the glycidyl ether, with acrylic acid [79-10-7] to give the vinyl monomer I(R1 = Me; R2 = n-C8H17, n = 15)(III) [51877-41-9]. **Suspension polymn.** of III with acrylonitrile with a redox catalyst gave an 82.5:17.5 acrylonitrile-polyethylene glycol 3-acryloyloxy-2-hydroxypropyl n-octyl ether copolymer [51937-37-2], reduced viscosity (0.3g/100 ml DMF, 35.deg.) 1.26. A soln. of 27 parts of this copolymer in 140 parts 70% HNO3 at 0.deg. was spun into 33% HNO3 at 0.deg. to give fibers with surface resistance 4 .tim. 1010 .OMEGA. (7 .tim. 1010 .OMEGA. after washing) and dry strength 3.0 g/denier, compared with 5 .tim. 1013 .OMEGA. and 3.1 g/denier for 90.5:9.0:0.5 acrylonitrile-methyl acrylate-sodium allylsulfonate copolymer (IV) [25053-78-5] fibers. Similar fibers were prepd. from 5 other acrylonitrile-I or -II copolymers. A 65:35 copolymer of acrylonitrile with II [R3 = Me, R4 = CN, Z = (CH2)4, n = 10] was spun in a 15:85 blend with IV to give fibers with surface resistance 5 .tim. 1010 .OMEGA. before and 6 .tim. 1010 .OMEGA. after washing. Five similar blends of acrylonitrile-I or -II copolymers with IV were similarly spun. A 15:85 copolymer of acrylonitrile with II (R3 = R4 = Me, Z = CH2CH2, n = 25) was prepd. and used in 1.5% aq. soln. as an antistatic finish for acrylic fiber garments.
IT **27252-75-1P**
(prepn. of)
RN 27252-75-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octyl-.omega.-hydroxy- (9CI) (CA

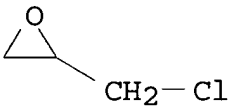
INDEX NAME)



IT **27252-75-1**
(reaction of, with epichlorohydrin)
RN 27252-75-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **106-89-8**, reactions
(with polyethylene glycol monooctyl ether)
RN 106-89-8 HCAPLUS
CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



IC C08F; D01F
CC 39-2 (Textiles)
IT **27252-75-1P** 52641-09-5P 52656-36-7P
(prepn. of)
IT **27252-75-1**
(reaction of, with epichlorohydrin)
IT **106-89-8**, reactions
(with polyethylene glycol monooctyl ether)

=> d l72 1-11 ti

L72 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Defoamers for aqueous systems such as latex paints

L72 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Defoamers for aqueous systems such as latex paints

L72 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Polymeric lubricant compositions, and methods for their use

L72 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Gloss retention additives for cleaning compositions

L72 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Alkyl polyglycoside compositions having reduced viscosity and inhibited crystallization

L72 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Water bath and method for electrolytic deposition of copper coatings

L72 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Ion-conducting polymer compositions showing temperature-independent conductivity

L72 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivatives as UV absorbers

L72 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Preparation of glycidyl ethers from alcohols and epichlorohydrin

L72 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Modified polyamines

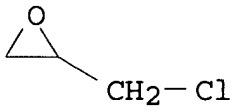
L72 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2002 ACS
TI Amphoteric surfactants

=> d l72 2,3,11 cbib abs hitstr hitind

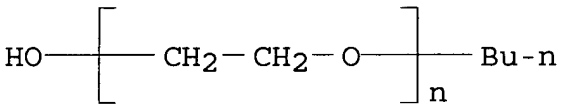
L72 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS
2002:10328 Document No. 136:71294 Defoamers for aqueous systems such as latex paints. Wiggins, Michael S.; Broadbent, Ronald W. (Cognis Corp., USA). PCT Int. Appl. WO 2002000319 A1 20020103, 23 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US20360 20010626. PRIORITY: US 2000-606092 20000627.
AB The products of the reaction of epichlorohydrin and compds. having the formula (I) R3(EO)n(PO)mOH wherein R3 is an alkyl, alkenyl or arenyl group having from 4 to 22 carbon atoms; a substituted alkyl or alkenyl group having from 4 to 22 carbon atoms wherein; n is a no. from 0 to 50 and m is a no. from 0 to 50; wherein the mole ratio of epichlorohydrin to I is from .apprx.0.60/1 to .apprx.2/1 are used in defoaming compns. for defoaming aq. systems such as latex paints.

IT **106-89-8**, Epichlorohydrin, reactions **9004-77-7D**, Butanol, ethoxylated **26183-52-8**, Trycol 5950 **26183-52-8D**, Decyl alcohol, ethoxylated **27252-75-1D**, Octyl, ethoxylated
(defoamers for aq. systems such as latex paints)

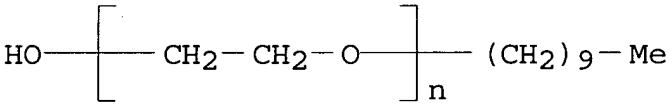
RN 106-89-8 HCAPLUS
CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



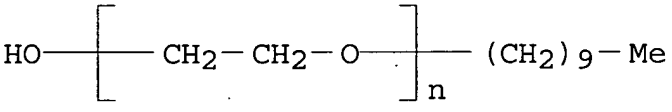
RN 9004-77-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



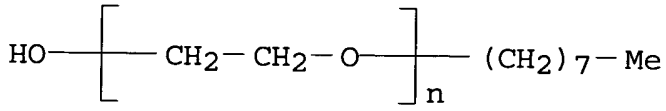
RN 26183-52-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 26183-52-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

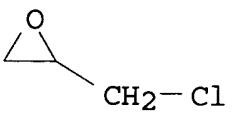


RN 27252-75-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



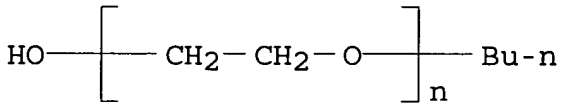
IC ICM B01D019-04
ICS B01F017-42; B01F017-56; C11D001-72; C11D003-22
CC 42-5 (Coatings, Inks, and Related Products)
IT **106-89-8**, Epichlorohydrin, reactions 108-88-3, Toluene, reactions 109-63-7, Boron trifluoride etherate 124-41-4, Sodium methoxide 1310-73-2, Sodium hydroxide, reactions **9004-77-7D**, Butanol, ethoxylated **26183-52-8**, Trycol 5950 **26183-52-8D**, Decyl alcohol, ethoxylated **27252-75-1D**, Octyl, ethoxylated
(defoamers for aq. systems such as latex paints)

L72 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS
2001:360117 Document No. 134:369235 Polymeric lubricant compositions, and methods for their use. Wiggins, Michael S.; Incorvia, Michael J.; Klima, Rudolph F.; Boudreaux, Chase J. (Cognis Corporation, USA). PCT Int. Appl. WO 2001034736 A1 20010517, 34 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US28750 20001018. PRIORITY: US 1999-PV161445 19991026; US 2000-672218 20000928.
AB The method of the invention comprises reducing friction and wear between solid surfaces which are, or which are to be, in relative motion, comprising applying to at least one of the solid surfaces a polymeric material as a synthetic lubricating oil. The lubricating oils can be used to lubricate solid surfaces where elevated operating temps. are present.
IT **106-89-8**, Epichlorohydrin, reactions **9004-77-7** **26183-52-8** **27252-75-1**
(polymeric lubricant compns., and methods for their use)
RN 106-89-8 HCAPLUS
CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)

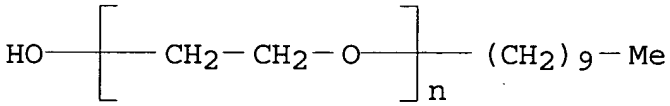


RN 9004-77-7 HCAPLUS

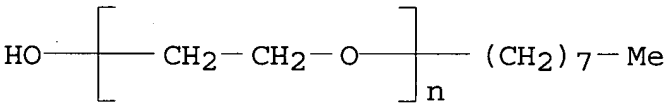
CN Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 26183-52-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 27252-75-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM C10M107-20
ICS C10M107-40
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
IT 67-56-1, Methanol, reactions 79-11-8, Chloroacetic acid, reactions **106-89-8**, Epichlorohydrin, reactions 112-70-9D, Tridecyl alcohol, ethoxylated 124-41-4, Sodium methoxide 624-48-6, Dimethyl maleate 1310-73-2, Sodium hydroxide, reactions 7681-57-4, Sodium metabisulfite **9004-77-7** 9016-45-9 24938-91-8 25322-68-3, Polyethylene glycol **26183-52-8** **27252-75-1** 29797-40-8 65605-36-9, Jeffamine ED-6000
(polymeric lubricant compns., and methods for their use)

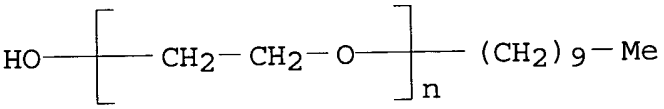
L72 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2002 ACS
1985:455716 Document No. 103:55716 Amphoteric surfactants. (Toho Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 60019030 A2 19850131 Showa, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1983-126188 19830713.
AB Surfactants RO(ZO)nCH2CHOHCH2N+HR1CH2CH2CO2- (I; R = C8-24 alkyl, alkenyl; R1 = C.ltoreq.5 alkyl; Z = ethylene, ethylene and propylene; n = 1-50) are prepd. by reaction of 1 mol epihalohydrin with 1 mol polyoxyalkylene alkyl (or alkenyl) ether, followed by treatment with 1 mol C.ltoreq.5 alkylamine and alkali to replace the terminal halogen with NHR1, then addn. reaction with a lower alkyl

acrylate, hydrolysis, and neutralization with acid. Thus, 1 mol epichlorohydrin and 1 mol polyoxyethylene lauryl ether (d.p. 5) were mixed 8 h at 70.degree. with 0.5 g Et2O.BF3 to obtain 1 mol 1-chloro-2-hydroxy-3-(lauryloxypolyethyleneoxy)propane [97332-31-5], which was mixed with 1 mol MeNH2 [74-89-5] and heated 4 h at 120.degree. to obtain N-[lauryloxy(polyethyleneoxy)hydroxypropyl]-N-methylamine (II) [97332-32-6] (amine no. 113.8). Then, 0.5 mol II and 0.5 mol Me acrylate [96-33-3] were mixed and heated at 120.degree. for 10 h, treated with an NaOH soln. at 70.degree. for 10 h, then neutralized to obtain 272 g N-[lauryloxy(polyethyleneoxy)hydroxypropyl]-N-methylalanine [96743-35-0], which was sol. in water, EtOH, 1% aq. NaOH, and 1% aq. HCl, and whose 1% and 0.1% aq. solns. both showed surface tension 32 dyne/cm.

IT **26183-52-8DP**, reaction products with epihalohydrins, amines and acrylate esters, hydrolyzed
(oligomeric, amphoteric surfactants, prepn. and properties of)

RN 26183-52-8 HCAPLUS

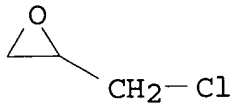
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **106-89-8**, reactions
(reaction of, with polyoxyalkylene alkyl ethers)

RN 106-89-8 HCAPLUS

CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



IC ICM B01F017-42
ICS B01F017-52

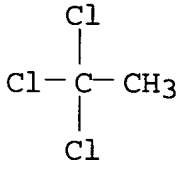
CC 46-3 (Surface Active Agents and Detergents)

IT 9002-92-0DP, reaction products with epihalohydrins, amines and acrylate esters, hydrolyzed 9004-95-9DP, reaction products with epihalohydrins, amines and acrylate esters, hydrolyzed 9004-98-2DP, reaction products with epihalohydrins, amines and acrylate esters, hydrolyzed 9005-00-9DP, reaction products with epihalohydrins, amines and acrylate esters, hydrolyzed 24938-91-8DP, reaction products with epihalohydrins, amines and acrylate esters, hydrolyzed **26183-52-8DP**, reaction products with epihalohydrins, amines and acrylate esters, hydrolyzed 37311-00-5DP, reaction products with epihalohydrins, amines and

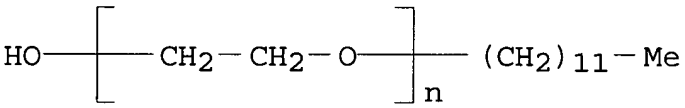
acrylate esters, hydrolyzed 37311-04-9DP, reaction products with ethylamine, Et 2-propenoate and bromomethyloxirane, hydrolyzed
(oligomeric, amphoteric surfactants, prepn. and properties of)
IT **106-89-8**, reactions 3132-64-7
(reaction of, with polyoxyalkylene alkyl ethers)

=> d l70 1-18 cbib abs hitstr hitind

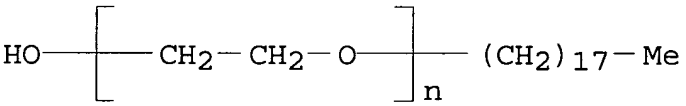
L70 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2002 ACS
2001:427377 Document No. 135:15441 Adjuvants for herbicidal compositions, providing enhanced effectiveness. Brinker, Ronald J.; Dyszlewski, Andrew D.; Gillespie, Jane L.; Jones, Claude R.; Kramer, Richard M.; Pallas, Norman R.; Radke, Rodney O.; Ward, Anthony J. I.; Xu, Xiaodong C. (Monsanto Company, USA). U.S. US 6245713 B1 20010612, 40 pp., Cont.-in-part of U.S. 6,184,182. (English). CODEN: USXXAM. APPLICATION: US 1999-298136 19990423. PRIORITY: US 1996-PV29317 19961025; US 1997-PV34887 19970131; US 1997-PV39789 19970304; US 1997-957750 19971024.
AB A compn. comprises, dissolved or **dispersed** in **water**, an anionic exogenous chem. substance such as the herbicide glyphosate, together with: (i) alkyl ether surfactant(s) [R1O(CH2CH2O)n[(CHR)2O]mR2 R1 = aliph. satd. or unsatd. C16-22 hydrocarby; n = 5-100; m = 0,1-5; R = H, Me or CHR2O; R2 = H, C1-4 alkyl or C2-4 acyl]; and (ii) amine surfactant(s) each having a mol. structure that comprises (a) a hydrophobic moiety having one or a plurality of independently satd. or unsatd., branched or unbranched, aliph., alicyclic or arom. C3-20 hydrocarbyl or hydrocarbylene groups joined together by 0 to about 7 ether linkages and having in total about 8 to about 24 carbon atoms, and (b) a hydrophilic moiety comprising an amino group that is cationic or that can be protonated to become cationic, having attached directly thereto 1 to 3 oxyethylene groups or polyoxyethylene chains, these oxyethylene groups and polyoxyethylene chains comprising on av. 1 to about 50 oxyethylene units per surfactant mol., the hydrophobic moiety being attached either to the amino group or via an ether linkage to an oxyethylene unit. The wt. ratio of the alkyl ether surfactant(s) to the amine surfactant(s) is about 1:10 to about 10:1; and the alkyl ether and amine surfactants are present in total in an adjuvant amt. of about 0.05 to about 0.5 parts by wt. per part by wt. of the herbicide, expressed as acid equiv. Also provided are solid and liq. conc. compns. that can be dild., dissolved or **dispersed** in **water** to form such a plant treatment compn.
IT **71-55-6**
(adjuvants for herbicidal compns., providing enhanced effectiveness)
RN 71-55-6 HCAPLUS
CN Ethane, 1,1,1-trichloro- (8CI, 9CI) (CA INDEX NAME)



IT **9002-92-0**, laureth-4 **9005-00-9**, brij 78
(adjuvants for herbicidal compns., providing enhanced effectiveness)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



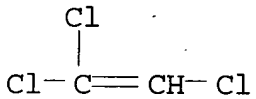
RN 9005-00-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



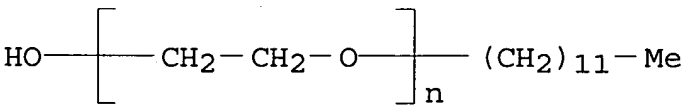
IC ICM A01N025-30
ICS A01N057-02
NCL 504206000
CC 5-3 (Agrochemical Bioregulators)
IT 50-31-7, 2,3,6-TBA **71-55-6** 75-99-0, Dalapon 85-34-7, Fenac 93-65-2, Mecoprop 94-74-6, MCPA 94-75-7, 2,4-D, biological studies 94-81-5, MCPB 94-82-6, 2,4-DB 112-05-0, Nonanoic acid 120-36-5, Dichlorprop 124-58-3, Methylarsonic acid 132-66-1, Naptalam 133-90-4, Chloramben 145-73-3, Endothall 314-40-9, Bromacil 1071-83-6, Glyphosate 1689-83-4, Ioxynil 1689-84-5, Bromoxynil 1702-17-6, Clopyralid 1918-00-9, Dicamba 1918-02-1, Picloram 3337-71-1, Asulam 3813-05-6, Benazolin 5329-14-6, Sulfamic acid 25057-89-0, Bentazon 35597-43-4, Bilanafos 38641-94-0, Roundup 40465-66-5, ammonium glyphosate 40843-25-2, Diclofop 50594-66-6, Acifluorfen 51276-47-2, Glufosinate 55335-06-3, Triclopyr 58667-63-3, Flamprop 59682-52-9, Fosamine 69335-91-7, Fluazifop 69806-34-4, Haloxyfop 72178-02-0, Fomesafen 76578-12-6, Quizalofop 77501-60-1, Fluoroglycofen 81334-34-1, Imazapyr 81335-37-7, Imazaquin 81335-77-5, Imazethapyr 84087-01-4, Quinclorac 87547-04-4, Flumiclorac 95617-09-7, Fenoxaprop 100728-84-5, Imazamethabenz

104098-48-8, Imazameth 114311-32-9, Imazamox
(adjuvants for herbicidal compns., providing enhanced effectiveness)
IT **9002-92-0**, laureth-4 **9005-00-9**, brij 78
(adjuvants for herbicidal compns., providing enhanced effectiveness)

L70 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2002 ACS
2000:674636 Document No. 133:224212 Fluorine-based oil and water repellent composition having better stability in storage. Lee, Soo-bok; Kim, Dong-kwon; Lee, Kwang-won; Kim, Kwang-je; Park, Inn-joon (Korea Research Institute of Chemical Technology, S. Korea). Repub. Korea KR 9700319 B1 19970108, No pp. given (Korean). CODEN: KRXXFC. APPLICATION: KR 1994-37129 19941227.
AB The mixt. of perfluoroalkylethyl acrylate, stearyl methacrylate, vinylidene chloride, N-methylolacrylamide, polyoxyethylene lauryl ether, stearyltrimethylammonium chloride, acetate, distd. water, azobisisobuthylamidine bihydrochloric acid salt and 1,1,2-trichloroethylene, are fed into the pressure reactor which is attached with a temp. adjusting device and an agitator, and which is made of a glass. The mixt. is stirred up and nitrogen substitution is made for 30 min. The temp. of the reactive soln. is risen to 60.degree. and polymer processing is made for 15 h, cooled off and a **water dispersion** type fluorine group water repelling agent in which 20% solid substance is included is produced.
IT **79-01-6**, 1,1,2-Trichloroethylene, uses **9002-92-0**, Polyoxyethylene lauryl ether
(compn. contg.; prepn. of fluorine-based oil and water repellent compn. having better stability in storage)
RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM D06M011-07
CC 40-9 (Textiles and Fibers)
IT **79-01-6**, 1,1,2-Trichloroethylene, uses 112-03-8,

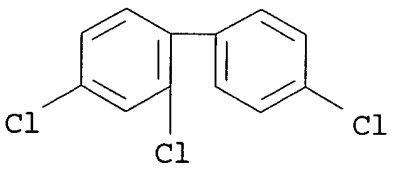
Stearyltrimethylammonium chloride **9002-92-0**,
Polyoxyethylene lauryl ether
(compn. contg.; prepn. of fluorine-based oil and water repellent compn. having better stability in storage)

L70 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1999:723543 Document No. 131:326866 Development and application of microemulsion for the in situ extraction of polychlorinated biphenyls from soil. Dierkes, Frank (Inst. Chem. Dynamik Geosphare 7 Angewandte Physikalische Chem., Forschungszentrum Julich G.m.b.H., Julich, D-52425, Germany). Berichte des Forschungszentrums Juelich, Juel-3679, 1-131 pp. (German) 1999. CODEN: FJBEE5. ISSN: 0366-0885.

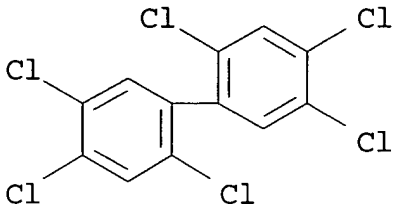
AB For the extn. of polychlorinated biphenyls a microemulsion consisting of biol. decomposable components is developed. The **microemulsion** remains **stable** at .apprx.10.degree. and is usable in the in situ soil remediation. The microemulsion system consists of equal amts. of water (with addn. of CaCl2) and rape oil Me ester. Na-bis(2-ethylhexyl)sulfosuccinate (AOT) and 2,5,8-trimethylnonylhexaglycolether (Tergitol TMN 6) are used as amphiphilic compds. At low temps. the undesired formation of liq. crystals in the microemulsion can be suppressed by increasing the electrolyte concn. in the water phase, but this leads to an unfavorable shift of the phase boundaries of the system. The substitution of a part of the nonionic surfactant by an ethoxylated castor oil suppresses the formation of liq. crystals. The extn. performance of the microemulsion system is investigated with doped soils in batch and glass column expts. The contaminant is removed nearly completely from the arable soil. Extn. rate is lower on sandy soil. The microemulsion system can be splitted specifically into an oil phase and a water phase by increasing the temp. From the tech. point of view the reuse of the water phase is uncrit., but legislative problems can arise.

IT **7012-37-5**, PCB 28 **35065-27-1**, PCB 153
35065-28-2, PCB 138 **35065-29-3**, PCB 180
35693-99-3, PCB 52 **37680-73-2**, PCB 101
(development and application of microemulsion for in situ extn. of polychlorinated biphenyls from soil)

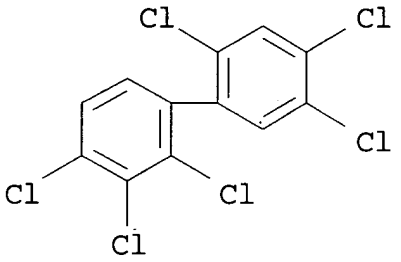
RN 7012-37-5 HCAPLUS
CN 1,1'-Biphenyl, 2,4,4'-trichloro- (9CI) (CA INDEX NAME)



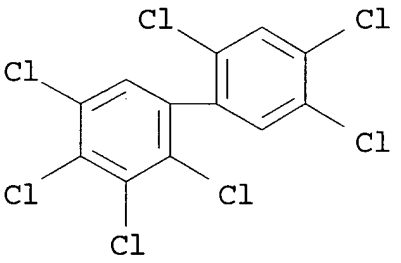
RN 35065-27-1 HCAPLUS
CN 1,1'-Biphenyl, 2,2',4,4',5,5'-hexachloro- (9CI) (CA INDEX NAME)



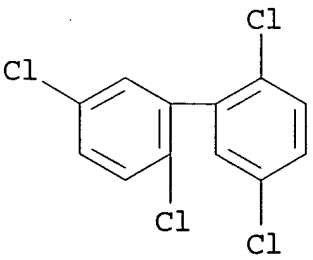
RN 35065-28-2 HCAPLUS
CN 1,1'-Biphenyl, 2,2',3,4,4',5'-hexachloro- (9CI) (CA INDEX NAME)



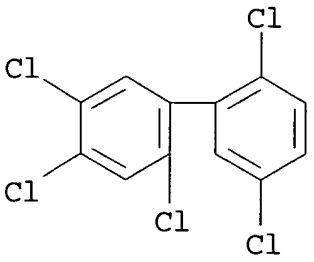
RN 35065-29-3 HCAPLUS
CN 1,1'-Biphenyl, 2,2',3,4,4',5,5'-heptachloro- (9CI) (CA INDEX NAME)



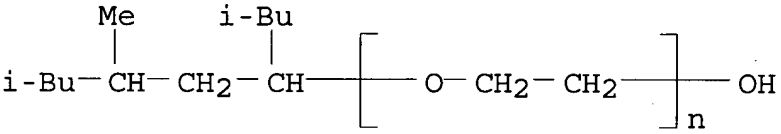
RN 35693-99-3 HCAPLUS
CN 1,1'-Biphenyl, 2,2',5,5'-tetrachloro- (9CI) (CA INDEX NAME)



RN 37680-73-2 HCAPLUS
CN 1,1'-Biphenyl, 2,2',4,5,5'-pentachloro- (9CI) (CA INDEX NAME)



IT **60828-78-6**, Tergitol TMN6
(development and application of microemulsion for in situ extn. of polychlorinated biphenyls from soil)
RN 60828-78-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[3,5-dimethyl-1-(2-methylpropyl)hexyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



CC 60-4 (Waste Treatment and Disposal)
Section cross-reference(s): 19
IT 118-74-1, HCB **7012-37-5**, PCB 28 **35065-27-1**, PCB 153 **35065-28-2**, PCB 138 **35065-29-3**, PCB 180 **35693-99-3**, PCB 52 **37680-73-2**, PCB 101
(development and application of microemulsion for in situ extn. of polychlorinated biphenyls from soil)
IT 577-11-7 **60828-78-6**, Tergitol TMN6 192391-56-3, RME
(development and application of microemulsion for in situ extn. of polychlorinated biphenyls from soil)

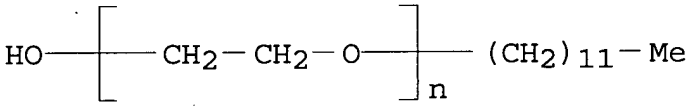
L70 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1999:455757 Document No. 131:134138 Single-phase microemulsification of a complex light-nonaqueous-phase-liquid: laboratory evaluation of several mixtures of surfactant/alcohol solutions. Rhue, R. Dean; Suresh, P.; Rao, C.; Annable, Michael D. (Soil and Water Science Dep., Gainesville, FL, 32611, USA). Journal of Environmental Quality, 28(4), 1135-1144 (English) 1999. CODEN: JEVQAA. ISSN: 0047-2425. Publisher: American Society of Agronomy.
AB A recent advance in conventional pump-and-treat technol. for aquifer remediation involves the use of surfactant-alc. mixts. that will form a clear, transparent, thermodynamically stable oil-in-**water microemulsion** on contact with a residual non-aq.-phase-liq. (NAPL). An initial screening of 86 com.-grade

surfactants for aq. soly. resulted in selection of 58 that were further tested in batch expts. to evaluate the capacity to solubilize a complex NAPL waste collected from a Superfund site (Operable Unit OU-1) at Hill AFB, UT. The selected group of 58 surfactants represented 6 classes of anionic, 9 classes of nonionic, and one class of amphoteric surfactants. Batch studies on NAPL solubilization identified a no. of surfactants suitable for use in the field demonstration phase of the project; a further criterion in surfactant selection was that the flushing soln. had a viscosity <2 cp. The best surfactants among this group had HLB (hydrophilic-lipophilic balance) values 12-13, and solubilized 10-20 g/L of the OU-1 NAPL when the surfactant concn. was 3%. Column tests using NAPL-coated glass beads showed that the more efficient surfactants could remove >90% of the NAPL after flushing with <10 pore vols. Brij 97, an ethoxylated alc. ether surfactant, showed a high capacity for solubilizing the OU-1 NAPL. In a column test using contaminated Hill AFB aquifer material, flushing with a mixt. of 3% Brij 97 and 2.5% n-pentanol removed essentially all of the mass of 9 target analytes in the NAPL after flushing with <10 pore vols. without mobilizing the NAPL or destabilizing aquifer colloids.

IT **9002-92-0**, Macol LA 790
(Brij 30, Brij 35, Macol LA 790; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

RN 9002-92-0 HCAPLUS

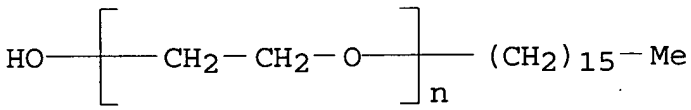
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **9004-95-9**
(Brij 56, Brij 58; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

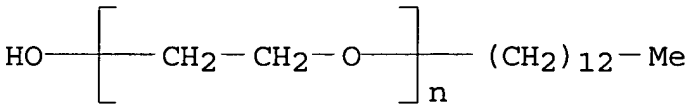
RN 9004-95-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

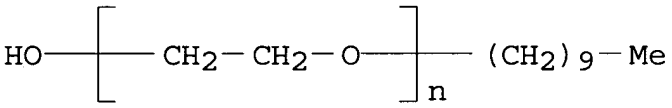


IT **24938-91-8**, Hetoxol TD 9
(Hetoxol TD 9; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

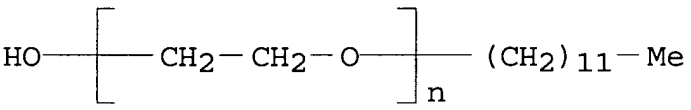
RN 24938-91-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



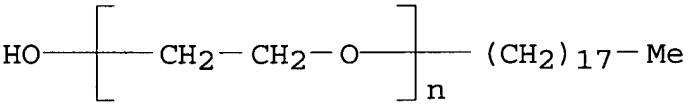
IT **26183-52-8**, Trycol 5953
(Trycol 5953; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)
RN 26183-52-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



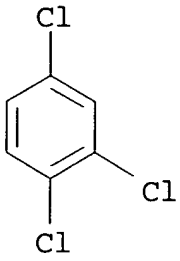
IT **9002-92-0 9005-00-9**, Brij 78
(single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 9005-00-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **120-82-1**, 1,2,4-Trichlorobenzene
(single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)
RN 120-82-1 HCAPLUS
CN Benzene, 1,2,4-trichloro- (8CI, 9CI) (CA INDEX NAME)



CC 61-2 (Water)
Section cross-reference(s): 46, 60

IT **Water** purification
(**microemulsification**; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

IT **9002-92-0**, Macol LA 790
(Brij 30, Brij 35, Macol LA 790; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

IT **9004-95-9**
(Brij 56, Brij 58; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

IT **24938-91-8**, Hetoxol TD 9
(Hetoxol TD 9; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

IT **26183-52-8**, Trycol 5953
(Trycol 5953; single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

IT 71-41-0, n-Pentanol, uses 151-21-3, Sodium dodecyl sulfate, uses 922-80-5, Aerosol AY 65 2373-38-8, Aerosol MA 80I **9002-92-0 9002-92-0 9002-92-0 9002-92-0 9002-92-0** 9004-82-4, Witcolate S-1285C 9004-99-3, Myrj-52 **9005-00-9**, Brij 78 9005-65-6, Tween 80 9005-66-7, Tween 40 9005-67-8, Tween 60 27731-62-0, Standapol ES-40 60371-17-7, Antarox LF-330 72175-39-4, Glucamate SSE-20 123898-54-4, Witcolate SE-5 138673-02-6, Alkasurf LA-EP 15 182915-72-6, Alcodet SK 205132-39-4, Antarox LF-224 234758-46-4, Emkapon Jel BS 234763-43-0, Syn Fac TDA 92 234764-72-8, Abitec WA 664 234767-37-4, Antarox LA-EP 25LF 234767-38-5, Antarox LA-EP 45 234767-41-0, Rexonic P 5 234767-46-5, Drewpol 10-1CCK 234768-21-9, DeSulf GOS-P 70
(single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

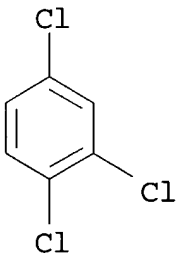
IT 91-20-3, Naphthalene, processes 95-50-1, 1,2-Dichlorobenzene 95-63-6, 1,2,4-Trimethylbenzene 112-40-3, n-Dodecane **120-82-1**, 1,2,4-Trichlorobenzene 124-18-5, n-Decane

629-50-5, n-Tridecane 1120-21-4, n-Undecane 1330-20-7, Xylene, processes
(single-phase microemulsification of complex light-nonaq.-phase-liq. and evaluation of mixts. of surfactant/alc. solns.)

L70 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1999:163464 Document No. 130:227036 Analytical monitoring of photocatalytic treatments. Degradation of 2,3,6-trichlorobenzoic acid in **aqueous** TiO2 **dispersions**. Prevot, Alessandra Bianco; Pramauro, Edmondo (Dipartinento di Chimica Analitica, Universita di Torino, Turin, 10125, Italy). Talanta, 48(4), 847-857 (English) 1999. CODEN: TLNTA2. ISSN: 0039-9140. Publisher: Elsevier Science B.V..

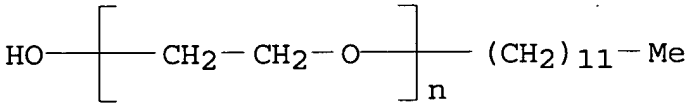
AB Photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid (2,3,6-TBA) in **aq**. TiO2 **dispersions** irradiated with simulated solar light was studied. Fast primary degrdn. of the herbicide, which obeys a pseudo-first order law, was obsd. Complete mineralization of the org. C to CO2 was obtained after long-term irradn., with corresponding stoichiometric transformation of org. Cl into Cl- ion. Various arom. intermediates, originating from 2,3,6-TBA, were detected during treatment and identified using gas chromatog.-mass spectrometry. From the anal. data, a possible multi-step degrdn. scheme is proposed. Photocatalytic treatment of the pesticide was also performed in the presence of Brij 35 micellar solns.; strong inhibition of the process was obsd. When surfactant aggregates are present, photocatalytic destruction of 2,3,6-TBA is still possible at reasonable rates only after a proper diln. of the waste and by significantly increasing the semiconductor:pollutant ratio.

IT **120-82-1**, 1,2,5-Trichlorobenzene
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)
RN 120-82-1 HCAPLUS
CN Benzene, 1,2,4-trichloro- (8CI, 9CI) (CA INDEX NAME)



IT **9002-92-0**, Brij 35
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)
RN 9002-92-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



CC 60-2 (Waste Treatment and Disposal)
Section cross-reference(s): 5, 61, 67

ST photocatalytic degrdn trichlorobenzoic acid **aq** titania **dispersion**; irradiated semiconductor photocatalysis pesticide water purifn; wastewater treatment irradiated semiconductor photocatalysis pesticide

IT Photolysis kinetics
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

IT Chlorides, processes
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

IT Wastewater treatment
Water purification
(photolytic, titania-catalyzed; anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

IT Solar UV radiation
(simulated; anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

IT 13463-67-7, Titania, uses
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

IT 95-95-4, 2,4,5-Trichlorophenol **120-82-1**, 1,2,5-Trichlorobenzene 124-38-9, Carbon dioxide, processes 583-78-8, 2,5-Dichlorophenol 608-94-6, Trichlorohydroquinone 933-75-5, 2,3,6-Trichlorophenol 933-78-8, 2,3,5-Trichlorophenol 25167-80-0, Chlorophenol 25321-22-6, Dichlorobenzene
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

IT **9002-92-0**, Brij 35
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

IT 50-31-7, 2,3,6-Trichlorobenzoic acid
(anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

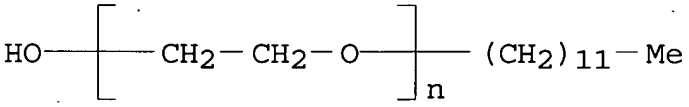
IT 7440-44-0, Carbon, processes
(total org.; anal. monitoring of surfactant effect on photocatalytic degrdn. of 2,3,6-trichlorobenzoic acid in **aq**. titania **dispersions**)

L70 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1998:538707 Document No. 129:293792 **Emulsion polymerization** of .gamma.-benzyl L-glutamate NCA intended for preparation microspheres of poly(amino acid)s. Goto, Kohei; Yamakawa, Yoshitaka; Yoshida, Yoshinori; Hayashi, Toshio (Tsukuba Res. Lab., JSR Corporation, Tsukuba, 305-0841, Japan). Seitai Zairyo, 16(3), 145-151 (Japanese) 1998. CODEN: SEZAEH. ISSN: 0910-304X. Publisher: Nippon Baiomateriaru Gakkai.

AB Polymn. of amino acid N-carboxy anhydrides (NCA) is usually carried out in anhyd. inert org. solvent, due to the tendency of amino acid NCA to be hydrolyzed with water. In this study we investigated the **emulsion polymn**. of .gamma.-benzyl-L-glutamate (BLG) in a mixt. of org. solvent/water in order to prep. microspheres of poly(amino acid). A high mol. wt. poly(.gamma.-benzyl-L-glutamate) (PBLG) could successfully be obtained with high yield by **emulsion polymn**. **stabilized** as O/W emulsion, when the emulsifier was a nonionic surfactant with high HLB and a chlorinated hydrocarbon was used as org. solvent, that exhibits a low soly. for water and appropriate dipole moment. Both factors lead to an increase of the polymn. rate. We also obtained the microspheres of PBLG with diam. of 200.apprx.300nm by distg. the org. solvent out of the emulsion, which is a novel and facile prepn. method of microspheres of poly(amino acid) derivs.

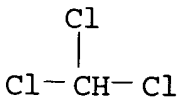
IT **9002-92-0**, Polyoxyethylene lauryl ether
(**emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))

RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **67-66-3**, Chloroform, processes
(**emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))

RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)



CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 34, 35
ST benzyl glutamate NCA **polymn emulsion** microsphere
IT Surfactants
(**emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))
IT **Polymerization**
(**emulsion; emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))
IT Drug delivery systems
(microspheres; **emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))
IT 50-00-0D, Formaldehyde, condensate with sodium naphthalenesulfonate, uses 112-00-5, Lauryltrimethylammonium chloride 1338-41-6, Sorbitan monostearate **9002-92-0**, Polyoxyethylene lauryl ether 9004-96-0, Polyoxyethylene monooleate 9005-64-5, Polyoxyethylene sorbitan monolaurate 9005-67-8, Polyoxyethylene sorbitan monostearate 9016-45-9, Polyoxyethylene nonylphenyl ether 9063-89-2, Polyoxyethylene octylphenyl ether 25155-30-0, Sodium dodecylbenzenesulfonate 25496-72-4, Glycerol monooleate 37340-69-5D, Polyoxyethylene sulfate, alkyl ethers, sodium salt
(**emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))
IT **67-66-3**, Chloroform, processes 75-09-2, Dichloromethane, processes 95-50-1, o-Dichlorobenzene 107-06-2, 1,2-Dichloroethane, processes 108-90-7, Chlorobenzene, processes 109-99-9, Thf, processes 141-78-6, Ethyl acetate, processes 355-42-0, Perfluorohexane
(**emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))
IT 3190-71-4, .gamma.-Benzyl L-glutamate N-carboxyanhydride
(**emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))
IT 25014-27-1P, Poly(.gamma.-benzyl L-glutamate) 25038-53-3P
(**emulsion polymn**. of .gamma.-benzyl L-glutamate NCA intended for prepn. microspheres of poly(amino acid))

L70 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1997:568187 Document No. 127:206352 Manufacture of epoxidized block

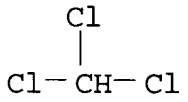
copolymers involving steam-stripping method. Oshino, Yasuhiro; Ohtsuka, Yoshihiro (Daicel Chemical Industries, Ltd., Japan; Oshino, Yasuhiro; Ohtsuka, Yoshihiro). PCT Int. Appl. WO 9730095 A1 19970821, 39 pp. DESIGNATED STATES: W: CN, KR, US; RW: DE, ES, FR, GB, IT, NL. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1996-JP334 19960216.

AB A process for producing an epoxidized block copolymer appropriate for modifying agents or modifying aids for rubbery polymers or resinous polymers, adhesives, sealants, etc. comprises epoxidizing a block copolymer which may be partly hydrated and comprises a polymer block (A) contg. a vinyl arom. hydrocarbon compd. as the main component and another polymer block (B) contg. a conjugated diene compd. as the main component to thereby synthesize an epoxidized block copolymer (C) and then recovering this **polymer** from a **slurry** or soln. thereof in an org. solvent by steam-stripping in the presence of a surfactant. It is preferably that the surfactant is a nonionic one, in particular, one represented by the general formula: HO(C2H4O)a(C3H6O)b(C2H4)cOH (a, b, c = 1-1000), having an av. mol. wt. of 3,000-20,000, and contg. 20-90 wt.% of polyoxyethylene. According to the process, the epoxidized block copolymer product can be easily recovered from the reaction mixt. without giving any prolonged heat history and thus the epoxy group can be prevented from undergoing ring opening. Also, it is possible to obtain an epoxidized block copolymer having such an epoxy equiv. as to give a high elasticity and the characteristics of epoxy compds.

IT **67-66-3**, Chloroform, uses
(solvent; manuf. of epoxidized block copolymers by steam-stripping method)

RN 67-66-3 HCAPLUS

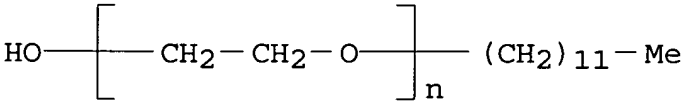
CN Methane, trichloro- (9CI) (CA INDEX NAME)



IT **9002-92-0**, Emulgen 147
(surfactant; manuf. of epoxidized block copolymers by steam-stripping method)

RN 9002-92-0 HCAPLUS

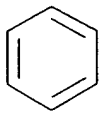
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM C08F008-08

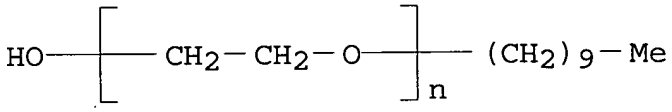
CC 37-3 (Plastics Manufacture and Processing)
IT **67-66-3**, Chloroform, uses 108-88-3, Toluene, uses 110-54-3, Hexane, uses 110-82-7, Cyclohexane, uses 141-78-6, Ethyl acetate, uses 1330-20-7, Xylene, uses
(solvent; manuf. of epoxidized block copolymers by steam-stripping method)
IT 112-00-5, Quartamin 24P 7664-38-2D, Phosphoric acid, alkyl esters, compds. with alkanolamine, uses **9002-92-0**, Emulgen 147 9003-11-6, Emulgen PP 290 9004-99-3, Emanon 3199 9016-45-9, Emulgen 985 26266-57-9, Rheodol SP P10 88984-51-4, Electrostripper F
(surfactant; manuf. of epoxidized block copolymers by steam-stripping method)

L70 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1997:414049 Document No. 127:35923 Brushed fabric and textile finish. Whitley, David Anderson; Wolhar, Carl Lewis (Ivax Industries, Inc., USA). PCT Int. Appl. WO 9716259 A1 19970509, 19 pp. DESIGNATED STATES: W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA, UZ, VN; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-US16976 19961023. PRIORITY: US 1995-550742 19951031.
AB Natural or synthetic pile or brushed fabrics are treated to reduce marking caused by rubbing or handling the fabrics, leaving the fabrics with a soft feel and a full, thick hand. The liq. finishing compns. comprise (a) .apprx.80-100% **water-dispersible**, hydrophilic polyester or polyurethane **dispersed** in an **aq.** medium; (b) .apprx.0-20% carrier used to enhance the penetration of dyes and other materials into the polymer structure of polyester fibers; and (c) .apprx.0-10% nonrewetting wetting agent. A treatment compn. of Milease T 93, 85/15 Bu benzoate/emulsifier 4.7, and ethoxylated decyl alc. (20% soln.) 2.3% was applied to woven polyester velour upholstery fabric.
IT **12002-48-1**, Trichlorobenzene **26183-52-8**, Polyethylene glycol decyl ether
(in finish for brushed fabric to reduce marking caused by handling)
RN 12002-48-1 HCAPLUS
CN Benzene, trichloro- (8CI, 9CI) (CA INDEX NAME)



3 (D1—Cl)

RN 26183-52-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-decyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM B05D003-02
ICS B32B003-02; B32B007-00; C08G018-28; C08G018-70; C08L067-02
CC 40-9 (Textiles and Fibers)
IT Polyesters, uses
Polyurethanes, uses
(**water-dispersible**, hydrophilic; in finish for brushed fabric to reduce marking caused by handling)
IT 65-85-0, Benzoic acid, uses 69-72-7, Salicylic acid, uses 90-43-7, o-Phenyl phenol 92-52-4, Biphenyl, uses 92-69-3, [1,1'-Biphenyl]-4-ol 95-57-8, o-Chlorophenol 98-85-1, Methylphenyl carbinol 98-86-2, Acetophenone, uses 100-52-7, Benzaldehyde, uses 108-90-7, uses 108-93-0, Cyclohexanol, uses 119-36-8, Methyl salicylate 119-64-2, Tetrahydronaphthalene 120-83-2, 2,4-Dichlorophenol 131-17-9, Diallyl phthalate 135-19-3, .beta.-Naphthol, uses 136-60-7, Butyl benzoate 513-08-6, Tripropylphosphate 567-47-5, .beta.-Naphtholsulfonic acid 1321-94-4, Monomethylnaphthalene 1322-19-6 **12002-48-1**, Trichlorobenzene 25321-22-6, Dichlorobenzene **26183-52-8**, Polyethylene glycol decyl ether 35884-90-3 73506-88-4 82852-79-7, Milease T
(in finish for brushed fabric to reduce marking caused by handling)

L70 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1996:544101 Document No. 125:177462 Surface-modified nanoparticles and method of making and using them. Levy, Robert J.; Labhasetwar, Vinod; Song, Cunxian S. (USA). PCT Int. Appl. WO 9620698 A2 19960711, 170 pp. DESIGNATED STATES: W: AL, AM, AT, AU, CA, CH, CN, CZ, DE, DK, GB, HU, IS, JP, KE, LU, VN, MN, NO, US; RW: AT, BE, CH, DE, ES, FR, GB, IT, LU, MR, NE, NL, PT, SE, NL, SN. (English). CODEN: PIXXD2. APPLICATION: WO 1996-US476 19960104. PRIORITY: US

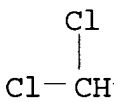
1995-369541 19950105; US 1995-389893 19950216.

AB Biodegradable controlled-release nanoparticles as sustained release bioactive agent delivery vehicles include surface modifying agents to target binding of the nanoparticles to tissues or cells of living systems, to enhance nanoparticle sustained release properties, and to protect nanoparticle-incorporated bioactive agents. Unique methods of making small (10 nm to 15 nm, and preferably 20 nm to 35 nm) nanoparticles having a narrow size distribution which can be surface-modified after the nanoparticles are formed is described. Techniques for modifying the surface include a lyophilization technique to produce a phys. adsorbed coating and epoxy-derivatization to functionalize the surface of the nanoparticles to covalently bind mols. of interest. The nanoparticles may also comprise hydroxy-terminated or epoxide-terminated and/or activated multiblock copolymers, having hydrophobic segments which may be polycaprolactone and hydrophilic segments. The nanoparticles are useful for local intravascular administration of smooth muscle inhibitors and antithrombogenic agents as part of interventional cardiac or vascular catheterization such as a balloon angioplasty procedure; direct application to tissues and/or cells for gene therapy, such as the delivery of osteotropic genes or gene segments into bone progenitor cells; or oral administration in an enteric capsule for delivery of protein/peptide based vaccines.

IT **67-66-3**, Chloroform, biological studies
(solvent; surface-modified polymer controlled-release nanoparticles for sustained drug delivery)

RN 67-66-3 HCAPLUS

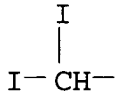
CN Methane, trichloro- (9CI) (CA INDEX NAME)



IT **75-47-8**, Iodoform
(surface-modified polymer controlled-release nanoparticles for sustained drug delivery)

RN 75-47-8 HCAPLUS

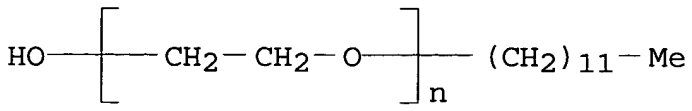
CN Methane, triiodo- (8CI, 9CI) (CA INDEX NAME)



IT **9002-92-0**, Polyoxyethylene lauryl ether
(surface-modified polymer controlled-release nanoparticles for sustained drug delivery)

RN 9002-92-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



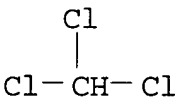
IC A61K009-51
CC 63-6 (Pharmaceuticals)
IT 67-64-1, 2-Propanone, biological studies **67-66-3**, Chloroform, biological studies 67-68-5, Dimethylsulfoxide, biological studies 68-12-2, Dimethylformamide, biological studies 75-09-2, Methylene chloride, biological studies 109-99-9, biological studies 123-91-1, Dioxane, biological studies 127-19-5, Dimethylacetamide 141-78-6, Ethyl acetate, biological studies 684-16-2, Hexafluoroacetone 920-66-1
(solvent; surface-modified polymer controlled-release nanoparticles for sustained drug delivery)
IT 75-23-0 **75-47-8**, Iodoform 102-54-5, Ferrocene 113-00-8, Guanidine 288-32-4, Imidazole, uses 558-13-4, Carbon tetrabromide 7550-45-0, Titanium tetrachloride, uses 7637-07-2D, Boron trifluoride, adducts 13598-36-2D, Phosphonic acid, alkylidenebis- derivs. 13826-88-5, Zinc tetrafluoroborate 86665-14-7, Zirconocene chloride
(surface-modified polymer controlled-release nanoparticles for sustained drug delivery)
IT 50-70-4, D-Glucitol, biological studies 57-09-0, Cetyl trimethyl ammonium bromide 57-10-3, Hexadecanoic acid, biological studies 57-88-5, Cholesterol, biological studies 69-65-8, D-Mannitol 102-71-6, Triethanolamine, biological studies 112-02-7, Hexadecyl trimethyl ammonium chloride 151-21-3, Sodium dodecyl sulfate, biological studies 577-11-7, Sodium dioctyl sulfosuccinate 1069-55-2, Isobutyl cyanoacrylate 3282-73-3, Didodecyldimethyl ammonium bromide 7445-62-7 7727-43-7, Barium sulfate 8007-43-0, Sorbitan sesquioleate 9000-65-1, Tragacanth 9000-69-5, Pectin 9002-89-5, Polyvinyl alcohol **9002-92-0**, Polyoxyethylene lauryl ether 9003-39-8, Polyvinyl pyrrolidone 9003-53-6, Polystyrene 9004-32-4 9004-34-6, Cellulose, biological studies 9004-35-7, Cellulose acetate 9004-44-8, Cellulose phthalate 9004-64-2, Hydroxypropyl cellulose 9004-99-3 9005-49-6, Heparin, biological studies 9015-73-0 9050-04-8, CM-cellulose calcium 9050-31-1, Hydroxypropyl methyl cellulose phthalate 10103-46-5, Calcium phosphate 25322-68-3 106392-12-5, Poloxamer 110617-70-4, Poloxamine 128835-92-7, Lipofectin 180741-27-9
(surface-modified polymer controlled-release nanoparticles for sustained drug delivery)
IT 7732-18-5, **Water**, biological studies
(**suspending** medium; surface-modified polymer controlled-release nanoparticles for sustained drug delivery)

L70 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1994:540284 Document No. 121:140284 Coated substrates and laminate structures comprising organic solvent-based dispersions of organocation-modified vermiculite.. Ou, Chia Chih; Bablouzian, Leon (W.R. Grace and Co.-Conn., USA). Eur. Pat. Appl. EP 601877 A1 19940615, 10 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1993-309981 19931210. PRIORITY: US 1992-989262 19921211.

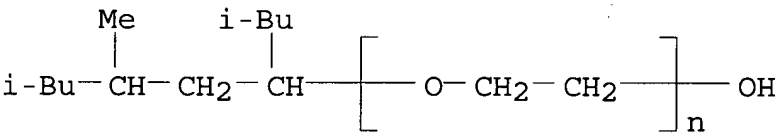
AB Coated substrates, and laminate structures consisting of intermediate layers provided by org. solvent-based dispersions of org. cation-modified delaminated vermiculite are disclosed. The laminates display better peel strength compared to laminates made from **water**-based **dispersions**, and can be used, e.g., for fire-resistant coatings, sealing gaskets, and gas barriers.

IT **67-66-3**, Chloroform, uses **60828-78-6**, Tergitol TMN-6
(in manuf. of vermiculite laminate building materials)

RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)



RN 60828-78-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[3,5-dimethyl-1-(2-methylpropyl)hexyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM C04B014-20
ICS C08K003-34; C08K007-26
CC 58-4 (Cement, Concrete, and Related Building Materials)
IT 57-09-0, Cetyltrimethylammonium bromide 67-56-1, Methanol, uses **67-66-3**, Chloroform, uses 78-93-3, Methyl ethyl ketone, uses 98-95-3, Nitrobenzene, uses 100-52-7, Benzaldehyde, uses 106-42-3, p-Xylene, uses 108-88-3, Toluene, uses 109-99-9, Tetrahydrofuran, uses 111-87-5, Octanol, uses 127-19-5, Dimethylacetamide 141-78-6, Ethyl acetate, uses 1318-00-9, Vermiculite 1330-20-7, Xylene, uses 24937-78-8, Ethylene-vinyl acetate copolymer 25038-32-8, Isoprene-styrene copolymer 39405-74-8, Terphane **60828-78-6**, Tergitol TMN-6

(in manuf. of vermiculite laminate building materials)

L70 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1991:512798 Document No. 115:112798 Acceleration of yeast autolysis by chemical methods for production of intracellular enzymes. Breddam, Klaus; Beenfeldt, Thorkild (Dep. Chem., Carlsberg Lab., Copenhagen Valby, DK-2500, Den.). Applied Microbiology and Biotechnology, 35(3), 323-9 (English) 1991. CODEN: AMBIDG. ISSN: 0175-7598.

AB Known methods for the acceleration of yeast autolysis were investigated and new methods were developed. Autolysis was induced by plasmolysis with a no. of solvents. The efficiency of this treatment is dependent on the nature of the solvent, its concn., and the duration of the treatment. Plasmolysis generally does not cause release of mols. of high mol. wt. (MW), such as enzymes. However, addn. of water initiates autolysis and the enzyme carboxypeptidase Y (MW 64,000), for example, is released. The rate of this process is very dependent on pH; at the optimal pH (.apprx.8.0) essentially complete autolysis is achieved within 20 h using the best solvents. Control of pH through the process is required. Straight-chain alcs. of medium chain length, i.e. C6-C9, appear to function efficiently in amts. of only 1.2 mL/100 g yeast. In amts. of 2.5-10 mL solvent/100 g yeast, trichloroethane, $CHCl_3$, and, in particular, ether also provide efficient plasmolysis. Treatment of an **aq. suspension** of yeast cells with a variety of nonionic as well as ionic detergents caused autolysis. The effect of pH corresponds to that obsd. with org. solvents, i.e., a pH of .apprx.8.0 is optimal. This autolysis was most efficient when the compressed yeast had been initially plasmolyzed by treatment with NaCl followed by addn. of water. The inexpensive detergents Triton X-100 and N-lauroylsarcosine appeared to be among the most efficient. These methods are inexpensive and can be employed on a large scale. In addn., cell debris is easily removed, which is very important for subsequent downstream processing. In the alternative method using phys. breakage by homogenization this step is highly problematic.

IT **25323-89-1**, Trichloroethane **60828-78-6**, Tergitol TMN6
(yeast autolysis by, for prodn. of intracellular enzymes)

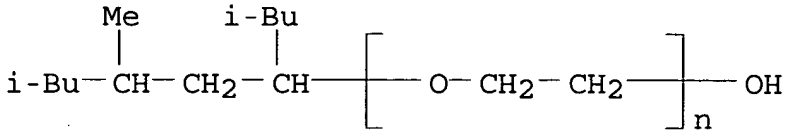
RN 25323-89-1 HCAPLUS
CN Ethane, trichloro- (8CI, 9CI) (CA INDEX NAME)

1/3 [H_3C-CH_3]

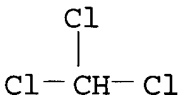
D1—Cl

RN 60828-78-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[3,5-dimethyl-1-(2-

methylpropyl)hexyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **67-66-3**, Chloroform, reactions
(yeast autolysis by, for prodn. of intracellular enzymes)
RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)



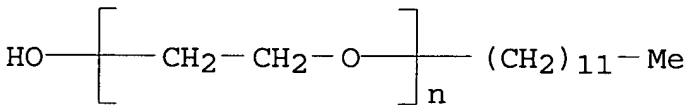
CC 16-9 (Fermentation and Bioindustrial Chemistry)
IT **25323-89-1**, Trichloroethane **60828-78-6**, Tergitol TMN6 75621-03-3
(yeast autolysis by, for prodn. of intracellular enzymes)
IT 56-23-5, Carbon tetrachloride, reactions 57-09-0, Hexadecyltrimethyl ammonium bromide **67-66-3**, Chloroform, reactions 71-41-0, 1-Pentanol, reactions 75-09-2, Dichloromethane, reactions 81-24-3, Taurocholic acid 97-78-9 111-13-7, 2-Octanone 111-27-3, 1-Hexanol, reactions 111-70-6, 1-Heptanol 111-87-5, 1-Octanol, reactions 112-30-1, 1-Decanol 112-53-8, 1-Dodecanol 123-03-5, Cetylpyridinium chloride 143-08-8, 1-Nonanol 591-78-6, 2-Hexanone 593-51-1D, trialkyl derivs. 9002-93-1, Triton X 101 9016-45-9, Tergitol NP40 9036-19-5
(yeast autolysis by, for prodn. of intracellular enzymes)

L70 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1990:520725 Document No. 113:120725 Indomethacin polymeric nanosuspensions prepared by microfluidization. Bodmeier, Roland; Chen, Huagang (Coll. Pharm., Univ. Texas, Austin, TX, 78712-1074, USA). Journal of Controlled Release, 12(3), 223-33 (English) 1990. CODEN: JCREEC. ISSN: 0168-3659.
AB Polymeric nanosuspensions contg. indomethacin were prepd. by a microfluidization-solvent evapn. method. The nanosuspensions were evaluated with respect to total drug content, drug content in the polymer and aq. phase, particle size, drug crystn. in the aq. phase, in vitro drug release, and stability to flocculation in 0.1N HCl and pH 7.4 phosphate buffer. Nanosuspensions with a total drug content of 35 mg indomethacin/mL nanosuspension could be prepd. without drug crystn. More than 98.permill. of the drug were found within the polymer phase. Unwanted drug crystn. in the aq. phase depended on the drug loading, the drug-polymer compatibility, the org. solvent,

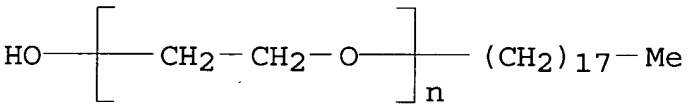
and the type and amt. of surfactant used. Indomethacin was released from Et cellulose nanoparticles within 15 min. Nanoparticles intended to provide drug release over longer periods of time were obtained by using mixts. of Et cellulose and poly(Me methacrylate). In pH 7.4 buffer, anionic, nonionic, and macromol. stabilizers protected the nanosuspensions against flocculation while nonionic surfactants were good stabilizers in 0.1N HCl.

IT **9002-92-0 9005-00-9**, Brij 78
(Et cellulose nanosuspension contg., indomethacin stability in relation to)

RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

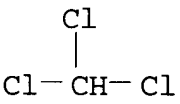


RN 9005-00-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **67-66-3**, uses and miscellaneous
(indomethacin dissoln. from nanosuspension in relation to)

RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)



CC 63-6 (Pharmaceuticals)

IT Particle size
(of **polymer** nanoparticles for **suspension**, sodium lauryl sulfate and pressure effect on)

IT 9002-89-5, Poly(vinyl alcohol) **9002-92-0** 9004-99-3 **9005-00-9**, Brij 78 9005-65-6, Tween 80 106392-12-5
(Et cellulose nanosuspension contg., indomethacin stability in relation to)

IT **67-66-3**, uses and miscellaneous 75-09-2, uses and miscellaneous 141-78-6, Acetic acid ethyl ester, uses and miscellaneous

(indomethacin dissoln. from nanosuspension in relation to)

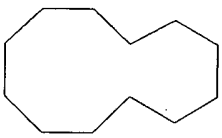
L70 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1987:460254 Document No. 107:60254 Manufacture of flame-retardant foams from urethane **polymer emulsions**. Mai, Kazumi; Midorikawa, Akio; Takegawa, Hisao; Kawanami, Eiji (Dainippon Ink and Chemicals, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 62041237 A2 19870223 Showa, 11 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1985-179462 19850816.

AB Title foams having good abrasion and light resistance, useful esp. for automobile seats, are manufd. by mech. foaming mixed emulsions of polyurethanes, conjugated diene and/or vinyl copolymers, ethylene oxide and/or propylene oxide polymers, and flame retardants, then spreading on substrates or casting in molds, and heating. Thus, a 1,6-hexamethylenediamine-polyoxypropylene glycol-TDI **copolymer** (I) **emulsion** was mixed with Tergitol XD (ethylene oxide-propylene oxide copolymer), acrylonitrile-butadiene-methacrylic acid **copolymer emulsion**, **emulsified** C6Br5OC6Br5 and Sb2O5, and other additives, mech. foamed, spread on polyester fabric, and heated at 120.degree. for 8 min to form a uniform, smooth foam sheet which passed the MVSS 302 flame retardance test, and showed good abrasion and light resistance, in contrast to one prepd. without the I and Tergitol XD.

IT **25637-99-4**, Hexabromocyclododecane
(flame retardants, polyurethane-polyoxyalkylene-vinyl/diene copolymer blend foams contg., manufd. from mixed emulsions)

RN 25637-99-4 HCAPLUS

CN Cyclododecane, hexabromo- (7CI, 8CI, 9CI) (CA INDEX NAME)



6 (D1—Br)

IT **9038-95-3**, Tergitol XD
(polyurethane-vinyl/diene **copolymer** mixed **emulsions** contg, with flame-retardants, foams manufd. from)

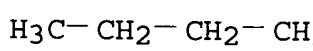
RN 9038-95-3 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, monobutyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 71-36-3

CMF C4 H10 O

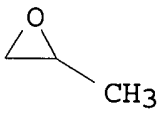


CM 2

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 3

CRN 75-56-9
CMF C3 H6 O



CM 4

CRN 75-21-8
CMF C2 H4 O

IC ICM C08J009-30
CC 38-3 (Plastics Fabrication and Uses)
IT Polyoxyalkylenes, uses and miscellaneous
(polyurethane-vinyl/diene **copolymer** mixed **emulsions** contg, with flame-retardants, foams manufd. from)
IT 1163-19-5, Decabromodiphenyl ether 1314-60-9, Antimony pentaoxide 6145-73-9 **25637-99-4**, Hexabromocyclododecane 36704-02-6
(flame retardants, polyurethane-polyoxyalkylene-vinyl/diene copolymer blend foams contg., manufd. from mixed emulsions)
IT **9038-95-3**, Tergitol XD
(polyurethane-vinyl/diene **copolymer** mixed **emulsions** contg, with flame-retardants, foams manufd. from)

L70 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2002 ACS

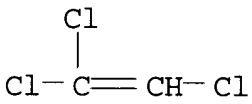
1985:134011 Document No. 102:134011 Soil-resistant detergents for carpets. (Tokyo Livin K. K., Japan). Jpn. Kokai Tokkyo Koho JP 59196400 A2 19841107 Showa, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1983-70145 19830422.

AB The detergents effective in prevention of soil redeposition for carpets surface-processed with F-compds. contain 0.01-0.4% nonionic surfactant and org. solvent (soly. .gtoreq.2% in water at 25.degree.) and water (in total 100%), and after drying solids other than the nonionic surfactant are negligible. The detergents remain in very small amts. after cleaning. Thus, a 5% **water dispersion** contg. 38% perfluoroalkyl group-contg. acrylate oligomer was spray-coated on a nylon 66 carpet (2400 denier), heated 14 min at 145.degree., and cut to prep. sample pieces (10 cm .times. 10 cm), which were washed by spraying (0.15 g/m2) with a detergent contg. poly(ethylene oxide) lauryl ether [**9002-92-0**] (d.p. 6) 0.05, MEK [78-93-3] 10, and water 89.95% and wiped off, showing good cleaning effect, soil resistance, and little redeposition.

IT **79-01-6**, uses and miscellaneous **9002-92-0**
(cleaning compns. contg., for carpets)

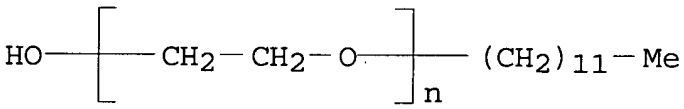
RN 79-01-6 HCAPLUS

CN Ethene, trichloro- (9CI) (CA INDEX NAME)



RN 9002-92-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC C11D010-02

CC 46-6 (Surface Active Agents and Detergents)

IT 71-36-3, uses and miscellaneous 78-83-1, uses and miscellaneous 78-93-3, uses and miscellaneous **79-01-6**, uses and miscellaneous 111-76-2 141-78-6, uses and miscellaneous **9002-92-0** 9003-11-6 9004-99-3 9016-45-9 25322-68-3D, ethers with sperm oil alcs.
(cleaning compns. contg., for carpets)

L70 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2002 ACS

1975:581045 Document No. 83:181045 Composition making textiles oil- and water-repellent. Inman, Charles E. (Pennwalt Corp., USA). Ger. Offen. DE 2460142 19750710, 26 pp. (German). CODEN: GWXXBX.

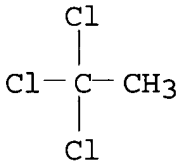
APPLICATION: DE 1974-2460142 19741219.

AB Emulsions for oil- and waterproofing textiles contain a chlorinated C1-3 alkane solvent, a small amt. of **water**, a finely **dispersed** fluoroalkyl **polymer** with C6-16 fluoroalkyl groups, and an **emulsion-stabilizing** nonionic surfactant with hydrophile-lipophile value 8-20. For example, a **water**-in-oil **emulsion** was prepd. by mixing methylchloroform [**71-55-6**] 100, Tween 40 [9005-66-7] surfactant 1, and fluoropolymer latex 25 g (contg. 20% polymer mixt. of 50 parts 80:20 C9F19CH2CH2SCOCMe:CH2-stearyl methacrylate polymer [30661-93-9] and 50 parts 71:5:24 butyl methacrylate-N-methylolacrylamide-3,5,5-trimethylhexyl methacrylate polymer [56993-04-5]). Cotton, polyester, acrylic, nylon, and cotton-polyester textiles finished with the emulsion had good oil and water repellency.

IT **71-55-6**
(solvents, fluoropolymer **water**-in-oil **emulsions** contg., for oil- and waterproofing of textiles)

RN 71-55-6 HCAPLUS

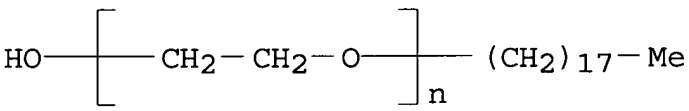
CN Ethane, 1,1,1-trichloro- (8CI, 9CI) (CA INDEX NAME)



IT **9005-00-9**
(surfactants, fluoropolymer **water**-in-oil **emulsions** contg., for oil- and waterproofing of textiles)

RN 9005-00-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-octadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC D06M

CC 39-10 (Textiles)

IT Oils
(-proofing, of textiles, fluoropolymer **water**-in-oil **emulsions** for)

IT Surfactants
(nonionic polyethylene glycol derivs., fluoropolymer **water**-in-oil **emulsions** contg., for oil- and waterproofing of textiles)

IT Waterproofing

(of textiles, fluoropolymer **water**-in-oil **emulsions** for)

IT Textiles
(oil- and waterproofing of cotton, fluoropolymer **water**-in-oil **emulsions** for)

IT Acrylic fibers
Polyamide fibers
Polyester fibers
(oil- and waterproofing of, fluoropolymer **water**-in-oil **emulsions** for)

IT Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ethers, fatty acid glyceride derivs.
(surfactants, fluoropolymer **water**-in-oil **emulsions** contg., for oil- and waterproofing of textiles)

IT **71-55-6**
(solvents, fluoropolymer **water**-in-oil **emulsions** contg., for oil- and waterproofing of textiles)

IT 1338-43-8 9004-98-2 9004-99-3 **9005-00-9** 9005-65-6 9005-66-7 9005-67-8 31694-55-0
(surfactants, fluoropolymer **water**-in-oil **emulsions** contg., for oil- and waterproofing of textiles)

L70 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2002 ACS

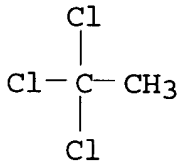
1973:443846 Document No. 79:43846 Laundry detergent composition. Marple, Walter L. (Whirlpool Corp.). U.S. US 3737387 19730605, 3 pp. (English). CODEN: USXXAM. APPLICATION: US 1970-46278 19700615.

AB Soils contg. complex fats, e.g. lard and butter, were efficiently removed from fabrics made from natural or synthetic fibers with a detergent compn. contg. 40-80% by vol. of a **water**-sol. **emulsifier** and 60-20% by vol. of an org. solvent. Thus, a mixt. of 40 vol.% polyethylene glycol mono(nonylphenyl) ether [9016-45-9] and 60 vol.% trichloroethylene [**79-01-6**] was dild. to a 0.2% aq. soln. A fabric soiled with lard was washed 5 min in a conventional home laundering detergent, then 5 min in the above soln. to give 77.3% lard removal. Increasing the 2nd cycle to 10 min removed 87.3% of the lard, compared with 42.0% lard removal after washing for 10 min with a 0.2% soln. of a conventional detergent.

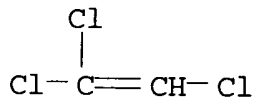
IT **71-55-6 79-01-6**
(cleaning **emulsions** contg. **water** and, for textiles)

RN 71-55-6 HCAPLUS

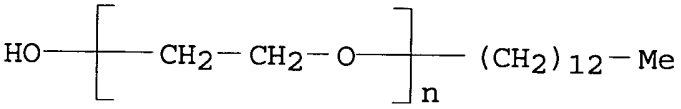
CN Ethane, 1,1,1-trichloro- (8CI, 9CI) (CA INDEX NAME)



RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



IT **24938-91-8**
(**emulsifying** agents, for **water**-solvent cleaning compns., for textiles)
RN 24938-91-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

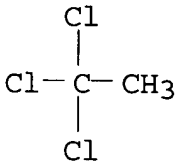


IC C09D; C11D; C23G
NCL 252170000
CC 46-6 (Surface Active Agents and Detergents)
ST polyethylene glycol chloroethylene detergent; lard removal soiled fabric; butter removal soiled fabric; **water** sol **emulsifier** detergent; org solvent emulsifier detergent; laundry detergent system
IT **71-55-6 79-01-6** 108-32-7 127-18-4
(cleaning **emulsions** contg. **water** and, for textiles)
IT 9003-11-6 9004-81-3 9004-87-9 9016-45-9 **24938-91-8**
(**emulsifying** agents, for **water**-solvent cleaning compns., for textiles)

L70 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1972:42770 Document No. 76:42770 Highly viscous pesticidal dispersions for spraying. Battani, Noel; Geiger, Max (Schloesing S. A; Ciba-Geigy A.-G.). Ger. Offen. DE 2109410 19711007, 53 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1971-2109410 19710227.
AB Pesticidal compns. were stored as oil-in-**water** **dispersions**, and were converted before use into highly viscous **water**-in-oil **dispersions**, by addn. of a dispersing agent in a polar solvent. Thus, a storable insecticidal oil-in-**water** **dispersion** contg. **H2O** 230, O,O-dimethyl O-(4-nitro-m-tolyl) phosphorothioate [122-14-5] 74, BuOAc 25, gas oil 335, 1:4 C12-14 alc.-ethylene oxide condensation product 12, 1:9 nonylphenol-ethylene oxide condensation product [**39587-22-9**] 3, CaCO3 375, and kaolin 150 g, was treated before use with 20 g fatty acid-fatty amine salt complex and

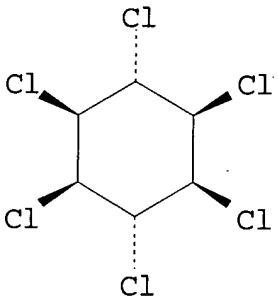
20 g propylene glycol [57-55-6] to give a 1 l. dispersion suitable for spraying.

IT **71-55-6**
(dispersing agents for pesticides)
RN 71-55-6 HCAPLUS
CN Ethane, 1,1,1-trichloro- (8CI, 9CI) (CA INDEX NAME)

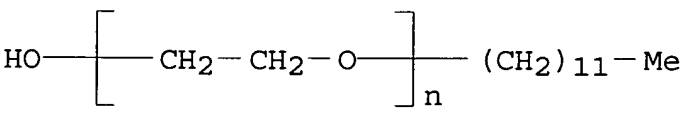


IT **58-89-9**
(oil-in-**water dispersions** of, manufg. of viscous)
RN 58-89-9 HCAPLUS
CN Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



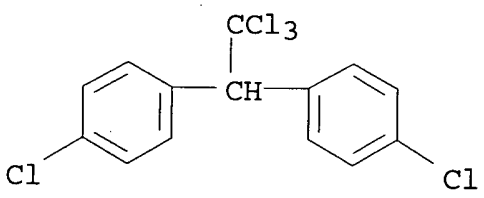
IT **9002-92-0**
(pesticide dispersion in oligomeric, prepn. of viscous)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **27044-11-7**
(pesticide dispersions in, prepn. of viscous)
RN 27044-11-7 HCAPLUS
IC A01N

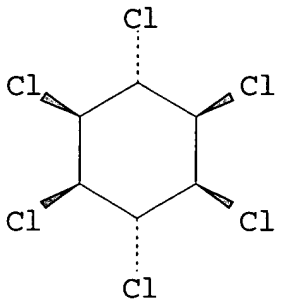
CC 5 (Agrochemicals)
IT Pesticides
(oil-in-**water dispersions** of, manufg. of viscous)
IT 57-55-6, biological studies **71-55-6** 108-94-1, biological studies
(dispersing agents for pesticides)
IT **58-89-9** 122-14-5 137-26-8 900-95-8 1344-71-4 8018-01-7 12122-67-7 35565-86-7
(oil-in-**water dispersions** of, manufg. of viscous)
IT **9002-92-0**
(pesticide dispersion in oligomeric, prepn. of viscous)
IT 9003-11-6 9056-20-6 **27044-11-7**
(pesticide dispersions in, prepn. of viscous)

L70 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2002 ACS
1967:45781 Document No. 66:45781 Treating the bark of trees to prevent insect damage by tree bark beetles and insects. Stewart, Katherine Ferguson (Stewart Operations, Inc.). U.S. US 3298913 19670117, 4 pp. (English). CODEN: USXXAM. APPLICATION: US 19650901.
AB The efficacy of insecticides such as benzene hexachloride and DDT against the tree bark beetle is enhanced by formulating a 1-5% **aq. dispersion** of the insecticide with 1-5% of a multicomponent surface active concentrate. The concentrate consists of a 596 mol. wt. condensate of ethylene oxide and tridecyl alc. 15-25, Na N-methyl-N-oleoyl taurate 1-2, MeOH or EtOH 2.5-3, ethylene glycol 30-5, Na2CrO4 0.05-0.5, Me, Et, or Bu Cellosolve 0.04-3, and H2O 25-45%.
IT **50-29-3**, biological studies **58-89-9**, biological studies **32126-89-9**
(insecticide compn. contg.)
RN 50-29-3 HCAPLUS
CN Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



RN 58-89-9 HCAPLUS
CN Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)- (9CI) (CA INDEX NAME)

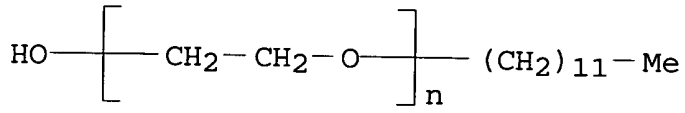
Relative stereochemistry.



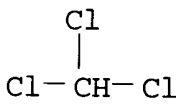
RN 32126-89-9 HCAPLUS
NCL 167042000
CC 19 (Pesticides)
IT **50-29-3**, biological studies **58-89-9**, biological studies 110-80-5 137-20-2 7775-11-3 **32126-89-9**
(insecticide compn. contg.)

=> d l71 1-24 cbib abs hitstr hitind

L71 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2002 ACS
2002:539870 Document No. 137:106051 Nucleic acid extraction solution and use thereof. Lentrichia, Brian; Cohenford, Menashi A. (Cytyc Corporation, USA). PCT Int. Appl. WO 2002055739 A2 20020718, 30 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US1430 20020115. PRIORITY: US 2001-PV261845 20010115.
AB Disclosed are methods and compns. for extg. nucleic acids from a biol. sample. In particular, disclosed is a nucleic acid extn. soln. together with method using such a soln. for extg. nucleic acid sequences from biol. samples contg. cells, cellular debris or both. The nucleic acid extn. soln. contains a mol. having the formula R1O-CH2-CH2-OR2, wherein R1 and R2 independently are selected from the group consisting of hydrogen and an alkyl group. Vaginal swab samples spiked with Neisseria gonorrhoeae were extd. with 1 % 2-methoxyethanol in 2 mM borate buffer, pH 9.5.
IT **9002-92-0**, Brij 35
(extn. soln. contg.; nucleic acid extn. soln. and use thereof)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **67-66-3**, Chloroform, miscellaneous
(nucleic acid extn. soln. and use thereof)
RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)



IC ICM C12Q001-68
ICS C12N015-10
CC 9-9 (Biochemical Methods)
Section cross-reference(s): 1, 3, 10, 14
IT Biological materials
Cell
Dissolution
Extraction
Heating
Human
Human papillomavirus
Nucleic acid amplification (method)
PCR (polymerase chain **reaction**)
pH
(nucleic acid extn. soln. and use thereof)
IT 77-86-1, Tris buffer 107-21-1, Ethylene glycol, uses 109-86-4, 2-Methoxyethanol 110-80-5, 2-Ethoxyethanol 111-76-2 589-35-5 593-84-0, Guanidinium thiocyanate 624-95-3 1132-61-2, MOPS 1333-73-9, Sodium borate 4439-24-1 **9002-92-0**, Brij 35 9002-93-1, Triton X-100 9005-64-5, Tween 20 16484-86-9, 1,2-Diethoxyethene
(extn. soln. contg.; nucleic acid extn. soln. and use thereof)
IT **67-66-3**, Chloroform, miscellaneous 108-95-2, Phenol, miscellaneous
(nucleic acid extn. soln. and use thereof)

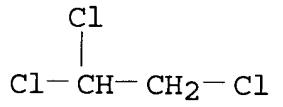
L71 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2002 ACS
2002:487712 Document No. 137:64931 Branched **reaction** products of amines and multifunctional compounds for aqueous compositions. Gross, Stephen F.; Li, Wei; Mao, Jianhua; Tuller, Norman; Wiggins, Michael S. (Cognis Corparation, USA). PCT Int. Appl. WO 2002050235 A1 20020627, 13 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,

MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US44739 20011129. PRIORITY: US 2000-PV256375 20001218; US 2001-PV281472 20010404; US 2001-975357 20011011.

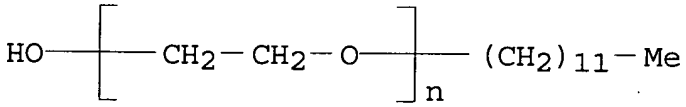
AB **Reaction** products of (A) an amine RX(EO)n(PO)m(BO)pZNHR1 where R = substituted or unsubstituted, satd. or unsatd., org. group having 4-36 C atoms, R1 = H or a C1-20 straight or branched chain alkyl, optionally substituted with OH group, X = O, S, or NR3 where R3 = H or a C1-4-alkyl, Z = ethylene, propylene or butylene, n = 0-100, m = 0-50, and p = 0-50, provided n+m+p is .gtoreq.1; and (B) a multifunctional compd. R2(Y)m, where R2 = straight or branched chain alkyl, alkenyl, or cycloaliph. group having 2-30 C atoms, or an unsubstituted or alkyl substituted arom. group, Y = carboxyl, carboxylic anhydride, halogen, carbonyl, acetyl halide, keto, aldehyde, or epoxy, and m = 2-10, and Y can be the same or different; give defoaming agents for liq. compns. (aq. and nonaq.).

IT **79-00-5DP**, 1,1,2-Trichloroethane, **reaction** products with polyethylene glycol dodecyl ether and propylamine
9002-92-0DP, Polyethylene glycol dodecyl ether, **reaction** products with propylamine and trichloroethane
(branched **reaction** products of amines and multifunctional compds. as low foaming surfactants or defoaming agents for liqs.)

RN 79-00-5 HCAPLUS
CN Ethane, 1,1,2-trichloro- (8CI, 9CI) (CA INDEX NAME)



RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM C11D017-00
ICS C11D001-825
CC 46-3 (Surface Active Agents and Detergents)
IT Antifoaming agents
(branched **reaction** products of amines and multifunctional compds. as low foaming surfactants or defoaming agents for liqs.)

IT Surfactants
(nonionic, low foaming; branched **reaction** products of amines and multifunctional compds. as low foaming surfactants or defoaming agents for liqs.)

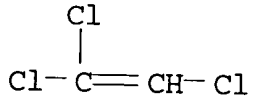
IT **79-00-5DP**, 1,1,2-Trichloroethane, **reaction** products with polyethylene glycol dodecyl ether and propylamine 107-10-8DP, Propylamine, **reaction** products with trichloroethane and polyethylene glycol dodecyl ether 2404-44-6DP, 1,2-Epoxydecane, **reaction** products with polyethylene glycol decyl ether oxypropylamine and ethylenediaminetetraacetic dianhydride **9002-92-0DP**, Polyethylene glycol dodecyl ether, **reaction** products with propylamine and trichloroethane 23911-25-3DP, Ethylenediaminetetraacetic dianhydride, **reaction** products with polyethylene glycol decyl ether oxypropylamine and epoxydecane 439152-57-5DP, **reaction** products with epoxydecane and ethylenediaminetetraacetic dianhydride
(branched **reaction** products of amines and multifunctional compds. as low foaming surfactants or defoaming agents for liqs.)

L71 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2002 ACS
2002:412950 Document No. 137:267631 The mechanisms of rate enhancing and quenching of trichloroethene photodecay in the presence of sensitizer and hydrogen sources. Chu, W.; Choy, W. K. (Research Centre for Urban Environmental Technology and Management, Department of Civil and Structural Engineering, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong). Water Research, 36(10), 2525-2532 (English) 2002. CODEN: WATRAG. ISSN: 0043-1354. Publisher: Elsevier Science Ltd..

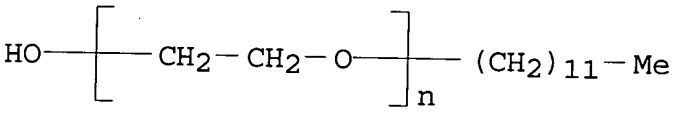
AB The **reaction** mechanisms and rates of trichloroethene (TCE) photodecay in the presence of photosensitizer (acetone, ACE) and hydrogen sources (surfactant and triethylamine, TEA) were investigated. Quantum yields of TCE photodecay in soln. with surfactant Brij 35 and optimal ACE dosage are about 25 times higher than in Brij 35 alone. However, with an excess ACE dosage, ACE will act as a light barrier and attenuate the light intensity available for TCE photodegrdn. TCE photodegrdn. follows a two-stage kinetics, in which a lag-phase is followed by a fast decay. The lag-phase distribution depends on initial pH levels and ACE concns. The overall TCE removal was found to be higher at high pH level, suggesting that free radical **reaction** is dominant at high pH levels. The use of addnl. hydrogen source (TEA) in the **reaction** can further accelerate the **reaction**, but overdosing of TEA would quench the **reaction**. The possible **reaction** mechanisms of TCE photodecay involving ACE and TEA were proposed, and rate-enhancing and rate-quenching models at low and high TEA concns. resp. were derived based on the proposed mechanism; they were found useful for predicting the TEC decay quantum yields.

IT **79-01-6**, Trichloroethene, processes
(mechanisms of rate enhancing and quenching of trichloroethene

photodecay in soln. with sensitizer and hydrogen sources)
RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



IT **9002-92-0**, Brij 35
(surfactant, hydrogen source; mechanisms of rate enhancing and quenching of trichloroethene photodecay in soln. with sensitizer and hydrogen sources)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

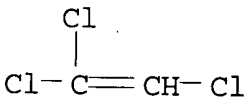


CC 60-2 (Waste Treatment and Disposal)
Section cross-reference(s): 19, 74
IT **79-01-6**, Trichloroethene, processes
(mechanisms of rate enhancing and quenching of trichloroethene photodecay in soln. with sensitizer and hydrogen sources)
IT 67-64-1, Acetone, **reactions**
(photosensitizer; mechanisms of rate enhancing and quenching of trichloroethene photodecay in soln. with sensitizer and hydrogen sources)
IT 121-44-8, Triethylamine, **reactions 9002-92-0**, Brij 35
(surfactant, hydrogen source; mechanisms of rate enhancing and quenching of trichloroethene photodecay in soln. with sensitizer and hydrogen sources)

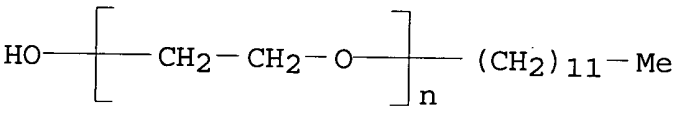
L71 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2002 ACS
2001:920927 Document No. 136:267783 The study of rate improvement of trichloroethene (TCE) decay in UV system with hydrogen source. Choy, W. K.; Chu, W. (Research Centre for Urban Environmental Technology and Management, Department of Civil and Structural Engineering, The Hong Kong Polytechnic University, Hong Kong, Hong Kong). Water Science and Technology, 44(6, Managing Water and Waste in the New Millennium), 27-33 (English) 2001. CODEN: WSTED4. ISSN: 0273-1223. Publisher: IWA Publishing.
AB The photosensitization of trichloroethene (TCE) in the presence of hydrogen source of surfactant and photosensitizer was investigated. Photolysis expts. were conducted with a Rayonet RPR-200 merry-go-round photoreactor at 253.7 nm. Solns. contg. fixed amt.

of TCE and surfactant Brij 35 were exposed to UV illumination with different concns. of acetone (ACE). Quantum yield in soln. with surfactant Brij 35 and optimum ACE dosage is about 25 times higher than that in Brij 35 alone. However, with an excess ACE dosage, it would act as a light barrier which attenuates the light intensity for TCE photodegrdn. A math. model is therefore developed for the prediction of TCE photodegrdn. in Brij 35 soln. contg. various ACE concns., in which the remaining fraction of TCE (C/C0) in the system can be detd. Apart from the direct photodegrdn., photosensitization is postulated to be another major pathway contributing to the overall decay.

IT **79-01-6**, Trichloroethylene, processes
(trichloroethene decay in UV system with hydrogen source)
RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



IT **9002-92-0**, Brij 35
(trichloroethene decay in UV system with hydrogen source)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



CC 61-5 (Water)
IT **79-01-6**, Trichloroethylene, processes
(trichloroethene decay in UV system with hydrogen source)
IT 67-64-1, Acetone, **reactions 9002-92-0**, Brij 35
(trichloroethene decay in UV system with hydrogen source)

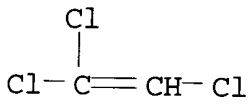
L71 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2002 ACS
2001:409205 Document No. 135:199760 The modelling of trichloroethene photodegradation in Brij 35 surfactant by two-stage **reaction**. Choy, W. K.; Chu, W. (Department of Civil and Structural Engineering, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong). Chemosphere, 44(2), 211-215 (English) 2001. CODEN: CMSHAF. ISSN: 0045-6535. Publisher: Elsevier Science Ltd..
AB Various clean-up technologies were developed for the removal and/or destruction of trichloroethene (TCE) in the subsurface. Surfactant-aided soil washing followed by photodegrdn. could be a promising approach to such a task. The modeling of TCE photodegrdn. by UV in Brij 35 surfactant micelles is therefore investigated. Two

stages of TCE degrdn. are obsd. in surfactant Brij 35 systems. A lag phase is obsd. at the commencement of the degrdn., but the duration of the lag phase is significantly reduced as the initial pH increases. As the overall decay of TCE is also found to be faster at higher pH levels, it is suggested that the free radical **reaction** is dominant at high pH levels, and the formation of lag phases is mainly due to the deficiency of free radicals at lower pH levels. Since the period of the lag phase gradually decreases with the increase of initial pH level, and the 2 pseudo 1st-order **reaction** consts. (one for the lag phase and one for the subsequent fast decay) for TCE decay in both stages are also pH dependent, a non-steady-state math. model is developed for the prediction of TCE photodegrdn. in Brij 35 solns., in which the remaining fraction of TCE (C/C0) in the system can be detd. at any instant by using a simple parameter of the initial system pH.

IT **79-01-6**, Trichloroethene, **reactions**
(modeling of trichloroethene photodegrdn. by UV in Brij 35 surfactant micelles)

RN 79-01-6 HCAPLUS

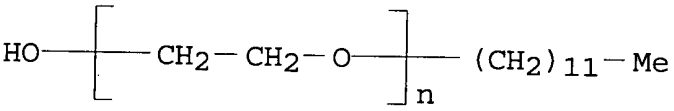
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



IT **9002-92-0**, Brij 35
(surfactant; modeling of trichloroethene photodegrdn. by UV in Brij 35 surfactant micelles)

RN 9002-92-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



CC 60-2 (Waste Treatment and Disposal)
Section cross-reference(s): 22, 46

IT **79-01-6**, Trichloroethene, **reactions**
(modeling of trichloroethene photodegrdn. by UV in Brij 35 surfactant micelles)

IT **9002-92-0**, Brij 35
(surfactant; modeling of trichloroethene photodegrdn. by UV in Brij 35 surfactant micelles)

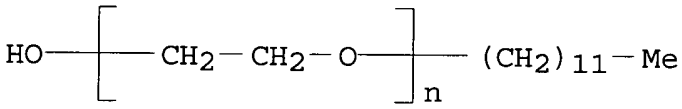
L71 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2002 ACS

2000:459449 Document No. 133:63380 The study of lag phase and rate improvement of TCE decay in UV/surfactant systems. Chu, Wei; Choy,

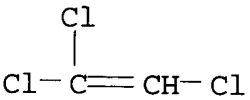
Wing-Ki (Department of Civil and Structural Engineering, Research Centre for Urban Environmental Technology and Management, The Hong Kong Polytechnic University, Hong Kong, Peop. Rep. China).
Chemosphere, 41(8), 1199-1204 (English) 2000. CODEN: CMSHAF. ISSN: 0045-6535. Publisher: Elsevier Science Ltd..

AB Photodegrdn. of trichloroethene (TCE) in surfactant micelles was studied in a Rayonet RPR-200 merry-go-round photoreactor at 253.7 nm monochromatic UV lamps, in the presence of surfactants. Surfactants were used as addnl. H sources to improve TCE photodegrdn. rates. About 3 times the rate increment was obsd. in the presence of Brij 35 surfactant micelles vs. water alone. Increasing H+ and Cl- concns. indicated they are the final products of TCE photodegrdn. (i.e., photodechlorination is the dominant mechanism in this system). A lag phase was obsd. at the beginning of the degrdn.; however, the lag phase duration is apparently reduced as initial pH increases. Since overall TCE decay was also faster at higher pH, it is suggested that the free radical **reaction** is dominant at high pH, and formation of lag phases is mainly due to the deficiency of free radicals at lower pH. Photodecompn. of TCE in surfactant micelles also proved to be a clean, effective process; it generates no chlorinated byproducts or intermediates, and TCE is fully decompd. within a reasonable time.

IT **9002-92-0**, Brij 35
(pH effect on lag phase and rate improvement of trichloroethylene photolytic decay in UV/surfactant systems)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **79-01-6**, Trichloroethene, processes
(pH effect on lag phase and rate improvement of trichloroethylene photolytic decay in UV/surfactant systems)
RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



CC 61-2 (Water)
Section cross-reference(s): 19, 46, 67
IT **9002-92-0**, Brij 35 9005-65-6, Tween 80
(pH effect on lag phase and rate improvement of trichloroethylene photolytic decay in UV/surfactant systems)

IT **79-01-6**, Trichloroethene, processes
(pH effect on lag phase and rate improvement of trichloroethylene photolytic decay in UV/surfactant systems)

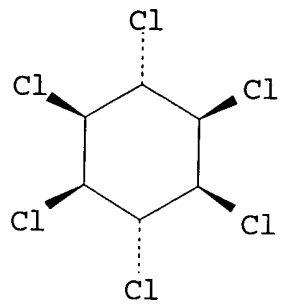
L71 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2002 ACS
2000:128324 Document No. 132:261508 Classifying environmental pollutants: Part 3. External validation of the classification system. Verhaar, Henk J. M.; Solbe, John; Speksnijder, John; Van Leeuwen, Cees J.; Hermens, Joop L. M. (OpdenKamp, Registration and Notification, The Hague, NL-2514 AB, Neth.). Chemosphere, 40(8), 875-883 (English) 2000. CODEN: CMSHAF. ISSN: 0045-6535. Publisher: Elsevier Science Ltd..

AB In order to validate a classification system for the prediction of the toxic effect concns. of org. environmental pollutants to fish, all available fish acute toxicity data were retrieved from the ECETOC database, a database of quality-evaluated aquatic toxicity measurements created and maintained by the European Center for the Ecotoxicol. and Toxicol. of Chems. The individual chems. for which these data were available were classified according to the rule base under consideration and predictions of effect concns. or ranges of possible effect concns. were generated. These predictions were compared to the actual toxicity data retrieved from the database. The results of this comparison show that generally the classification system provides adequate predictions of either the aquatic toxicity (class 1) or the possible range of toxicity (other classes) of org. compds. A slight underestimation of effect concns. occurs for some highly water-sol., **reactive** chems. with low log KDW values. On the other end of the scale, some compds. that are classified as belonging to a relatively toxic class appear to belong to the so-called baseline toxicity compds. For some of these, addnl. classification rules are proposed. Furthermore, some groups of compds. cannot be classified, although they should be amendable to predictions. For these compds. addnl. research as to class membership and assocd. prediction rules is proposed.

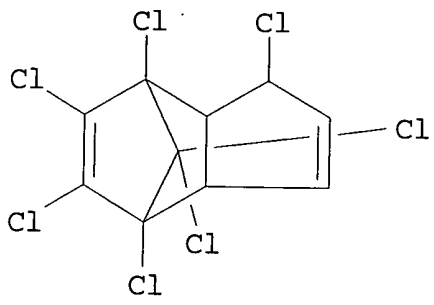
IT **58-89-9**, Lindane **76-44-8**, Heptachlor
79-00-5, 1,1,2-Trichloroethane **79-01-6**,
Trichloroethylene, biological studies **79-34-5**,
1,1,2,2-Tetrachloroethane **120-82-1**, 1,2,4-Trichlorobenzene
3389-71-7 9002-92-0
(external validation of classification system for environmental pollutants)

RN 58-89-9 HCAPLUS
CN Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)- (9CI) (CA INDEX NAME)

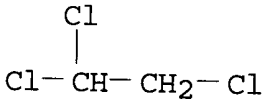
Relative stereochemistry.



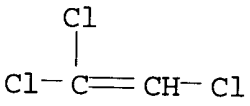
RN 76-44-8 HCAPLUS
CN 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9CI) (CA INDEX NAME)



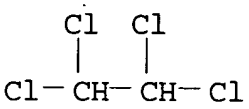
RN 79-00-5 HCAPLUS
CN Ethane, 1,1,2-trichloro- (8CI, 9CI) (CA INDEX NAME)



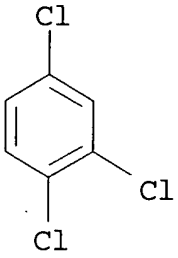
RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



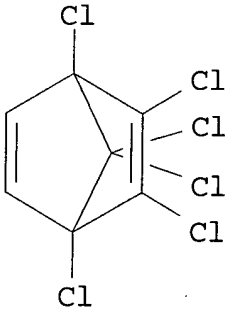
RN 79-34-5 HCAPLUS
CN Ethane, 1,1,2,2-tetrachloro- (8CI, 9CI) (CA INDEX NAME)



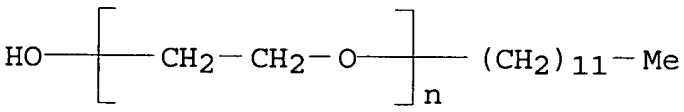
RN 120-82-1 HCAPLUS
CN Benzene, 1,2,4-trichloro- (8CI, 9CI) (CA INDEX NAME)



RN 3389-71-7 HCAPLUS
CN Bicyclo[2.2.1]hepta-2,5-diene, 1,2,3,4,7,7-hexachloro- (9CI) (CA INDEX NAME)



RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

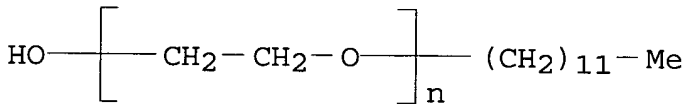


CC 4-3 (Toxicology)
Section cross-reference(s): 61
IT 51-28-5, 2,4-Dinitrophenol, biological studies 56-38-2, Parathion **58-89-9**, Lindane 62-53-3, Aniline, biological studies 63-25-2, Carbaryl 67-56-1, Methanol, biological studies 67-72-1,

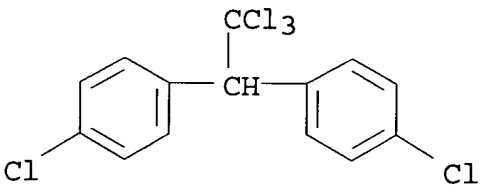
Hexachloroethane 68-12-2, Dimethylformamide, biological studies 71-36-3, 1-Butanol, biological studies 71-43-2, Benzene, biological studies 72-20-8, Endrin 74-90-8, Hydrogen cyanide, biological studies 75-09-2, Dichloromethane, biological studies 75-21-8, Ethylene oxide, biological studies 75-56-9, Propylene oxide, biological studies **76-44-8**, Heptachlor 78-92-2, 2-Butanol **79-00-5**, 1,1,2-Trichloroethane **79-01-6**, Trichloroethylene, biological studies 79-06-1, Acrylamide, biological studies **79-34-5**, 1,1,2,2-Tetrachloroethane 80-05-7, Bisphenol A, biological studies 83-32-9, Acenaphthene 84-69-5 84-74-2, Dibutylphthalate 85-68-7, Benzylbutylphthalate 87-86-5, Pentachlorophenol 88-06-2, 2,4,6-Trichlorophenol 88-30-2, 3-Trifluoromethyl-4-nitrophenol 88-85-7, 2,4-Dinitro-6-(sec-butyl)phenol 95-47-6, o-Xylene, biological studies 95-48-7, o-Cresol, biological studies 95-57-8, 2-Chlorophenol 96-22-0, 3-Pentanone 98-51-1, 4-tert-Butyltoluene 100-02-7, 4-Nitrophenol, biological studies 100-42-5, Styrene, biological studies 100-52-7, Benzaldehyde, biological studies 105-67-9, 2,4-Dimethylphenol 106-42-3, p-Xylene, biological studies 106-44-5, p-Cresol, biological studies 106-46-7, 1,4-Dichlorobenzene 106-51-4, 2,5-Cyclohexadiene-1,4-dione, biological studies 106-68-3, 3-Octanone 106-89-8, Epichlorohydrin, biological studies 106-92-3, Allylglycidyl ether 107-02-8, Acrolein, biological studies 107-05-1, Allyl chloride 107-07-3, 2-Chloroethanol, biological studies 107-18-6, Allyl alcohol, biological studies 107-70-0 108-10-1, Methyl isobutyl ketone 108-20-3, Diisopropyl ether 108-38-3, m-Xylene, biological studies 108-39-4, m-Cresol, biological studies 108-68-9, 3,5-Dimethylphenol 108-88-3, Toluene, biological studies 108-90-7, Chlorobenzene, biological studies 108-95-2, Phenol, biological studies 109-70-6, 1-Chloro-3-bromopropane 110-49-6, Ethyleneglycol monomethyl ether acetate 111-15-9, Ethyleneglycol monoethyl ether acetate 111-78-4, 1,5-Cyclooctadiene 111-87-5, 1-Octanol, biological studies 112-30-1, Decanol 112-34-5, Diethyleneglycol monobutyl ether 115-29-7, Endosulfan 115-32-2, Kelthane 116-06-3, Aldicarb 118-79-6, 2,4,6-Tribromophenol **120-82-1**, 1,2,4-Trichlorobenzene 120-83-2, 2,4-Dichlorophenol 121-46-0, Bicyclo(2.2.1)hepta-2,5-diene 121-75-5, Malathion 122-60-1, Phenylglycidyl ether 123-54-6, 2,4-Pentanedione, biological studies 127-18-4, Tetrachloroethylene, biological studies 141-79-7, Mesityl oxide 142-28-9, 1,3-Dichloropropane 143-08-8, 1-Nonanol 298-00-0, Methylparathion 298-04-4, Disulfoton 333-41-5, Diazinon 504-20-1, Phorone 534-52-1, 2-Methyl-4,6-dinitrophenol 544-25-2, 1,3,5-Cycloheptatriene 563-47-3, 3-Chloro-2-methylpropene 576-26-1, 2,6-Dimethylphenol 577-19-5, 2-Bromonitrobenzene 627-30-5, 3-Chloropropanol 693-21-0, Diethyleneglycol dinitrate 935-95-5, 2,3,5,6-Tetrachlorophenol 944-22-9, Fonofos 1204-21-3 1471-17-6, Pentaerythritol triallyl ether 1582-09-8, Trifluralin 1912-24-9, Atrazine 1918-02-1, Picloram 1962-75-0, Dibutylterephthalate 2212-67-1, Molinate 2461-15-6, 2-Ethylhexylglycidyl ether 2921-88-2, Chloropyrifos

3389-71-7 3698-83-7, 4,6-Dichloro-1,3-dinitrobenzene 4904-61-4, 1,5,9-Cyclododecatriene 6515-38-4, 3,5,6-Trichloro-2-pyridinol **9002-92-0** 9002-93-1, Triton X-45 9016-45-9 11097-69-1, PCB 1254 28249-77-6, Thiobencarb 31557-34-3, 2-Methoxy-3,5,6-trichloropyridine 51630-58-1, Fenvalerate 52645-53-1, Permethrin 52918-63-5, Deltamethrin 53469-21-9, PCB 1242 66330-88-9, Hydrothol-191 70124-77-5, AC 222705
(external validation of classification system for environmental pollutants)

L71 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1999:589104 Document No. 131:310372 Study of the **Reaction** 1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane(DDT) + OH- in Nonionic Micellar Solutions. Munoz, Maria; Rodriguez, Amalia; Graciani, Maria del Mar; Ortega, Francisco; Vazquez, Maria; Moya, Maria Luisa (Departamento de Quimica Fisica, Universidad de Sevilla, Seville, 41012, Spain). Langmuir, 15(22), 7876-7879 (English) 1999. CODEN: LANGD5. ISSN: 0743-7463. Publisher: American Chemical Society.
AB Kinetic micellar effects for the title **reaction** in aq. Brij35 and Triton X-100 nonoionic micellar solns. were rationalized by structural studies using surface tension, as well as fluorescence and light scattering measurements.
IT **9002-92-0**, Brij35
(kinetic micellar effects in deydrochlorination of DDT in presence of hydroxide in aq.)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **50-29-3**, DDT, **reactions**
(kinetic micellar effects in deydrochlorination of DDT in presence of hydroxide in aq.)
RN 50-29-3 HCAPLUS
CN Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



CC 22-13 (Physical Organic Chemistry)

Section cross-reference(s): 66

IT **9002-92-0**, Brij35 9002-93-1, Triton X-100
(kinetic micellar effects in deydrochlorination of DDT in presence of hydroxide in aq.)

IT **50-29-3**, DDT, **reactions**
(kinetic micellar effects in deydrochlorination of DDT in presence of hydroxide in aq.)

IT 14280-30-9, Hydroxide, **reactions**
(kinetic micellar effects in deydrochlorination of DDT in presence of hydroxide in aq.)

L71 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2002 ACS

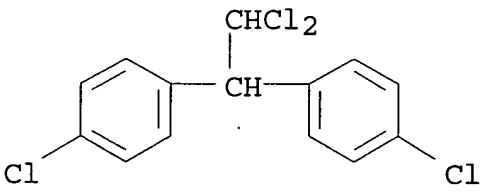
1998:793401 Document No. 130:85409 Photodechlorination Mechanism of DDT in a UV/Surfactant System. Chu, Wei (Department of Civil and Structural Engineering, Hong Kong Polytechnic University, Kowloon, Hong Kong). Environmental Science and Technology, 33(3), 421-425 (English) 1999. CODEN: ESTHAG. ISSN: 0013-936X. Publisher: American Chemical Society.

AB The photochem. **reactions** of the organochlorine pesticide DDT in aq. solns. contg. nonionic surfactant micelles (Brij 35, Brij 52, and Brij 72) were studied and modeled. All photolytic expts. were conducted in a Rayonet RPR-200 merry-go-round photoreactor using a 253.7-nm Hg monochromatic UV lamps. Pseudo-1st-order decay through photodechlorination was the dominant **reaction** pathway for DDT photodecay. The primary photoproducts include lesser chlorinated compds. (DDE and DDD) and HCl. The photodechlorination of DDT involves 2 stages; the 1st is the fast aliph. Cl redn., followed by a slow arom. Cl redn. The photodecay rates of DDT were doubled in the Brij 52 micellar soln. compared to that in water alone. A 1st-order parallel/consecutive model was developed to predict the photodecay of DDT and the generation of DDE/DDD in the micellar/aq. system.

IT **72-54-8**, Ddd **72-55-9**, DDE, formation
(nonpreparative)
(photodechlorination mechanism of DDT in UV/surfactant system)

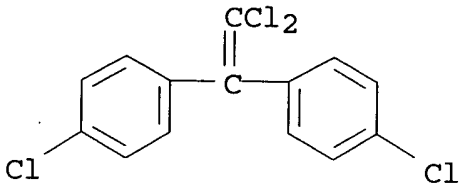
RN 72-54-8 HCAPLUS

CN Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- (9CI) (CA INDEX NAME)

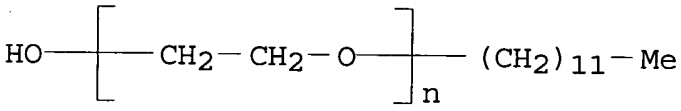


RN 72-55-9 HCAPLUS

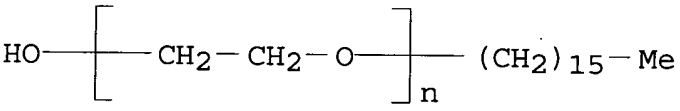
CN Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



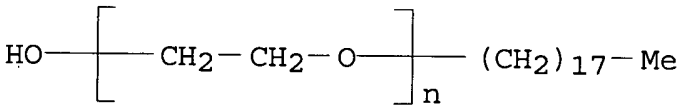
IT **9002-92-0**, Brij 35 **9004-95-9**, Brij 52
9005-00-9, Brij 72
(photodechlorination mechanism of DDT in UV/surfactant system)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



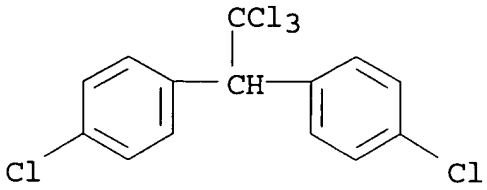
RN 9004-95-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 9005-00-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-octadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



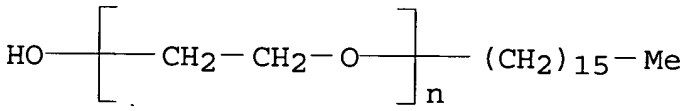
IT **50-29-3**, DDT, processes
(photodechlorination mechanism of DDT in UV/surfactant system)
RN 50-29-3 HCAPLUS
CN Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



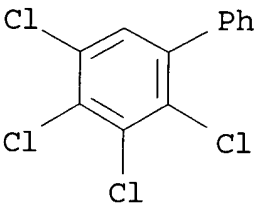
CC 60-2 (Waste Treatment and Disposal)
Section cross-reference(s): 5
IT **72-54-8**, Ddd **72-55-9**, DDE, formation (nonpreparative) 7647-01-0, Hydrogen chloride, formation (nonpreparative)
(photodechlorination mechanism of DDT in UV/surfactant system)
IT **9002-92-0**, Brij 35 **9004-95-9**, Brij 52
9005-00-9, Brij 72
(photodechlorination mechanism of DDT in UV/surfactant system)
IT **50-29-3**, DDT, processes
(photodechlorination mechanism of DDT in UV/surfactant system)

L71 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1998:325409 Document No. 129:19220 Phototransformations of Polychlorobiphenyls in Brij 58 Micellar Solutions. Chu, Wei; Jafvert, Chad T.; Diehl, Claude A.; Marley, Karen; Larson, Richard A. (School of Civil Engineering, Purdue University, West Lafayette, IN, 47907-1284, USA). Environmental Science and Technology, 32(13), 1989-1993 (English) 1998. CODEN: ESTHAG. ISSN: 0013-936X. Publisher: American Chemical Society.
AB Our purpose in conducting these studies was to examine photolysis as a destructive process for polychlorobiphenyls (PCBs) extd. from soils with surfactant solns. Surfactants have shown promise as agents for removing free-phase and sorbed contaminants from soils, yet information on ultimate disposal options and recycle/recovery strategies for the surfactants is generally lacking. For aryl halides, photodechlorination may result in decontamination, eliminating the need to phys. sep. these contaminants from the washing soln. Photochem. **reactions** of the PCB congener mixt., Aroclor 1254, and the specific congener, 2,3,4,5-tetrachlorobiphenyl (2,3,4,5-TeCB), were investigated in aq. solns. contg. surfactant micelles with UV light at 253.7 nm. Photoredn. through photodechlorination was shown to be the main decay pathway in which lesser chlorinated congeners were formed as intermediates. In expts. with 2,3,4,5-TeCB, final noncarbon-contg. products included Cl- and H+, both produced nearly stoichiometrically from the starting materials. The quantum yield for decay of 0.1.mu.M 2,3,4,5-TeCB in 0.5 mM Brij 58 micellar solns. was over six times greater than in water alone. Sequential extn. from a soil and photoredn. of 2,3,4,5-tetrachlorobiphenyl by Brij 58 solns. proved to be limited by surfactant loss to the soil.
IT **9004-95-9**, Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy-

(phototransformations of polychlorobiphenyls in Brij 58 micellar solns. in relation to soil remediation)
RN 9004-95-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **33284-53-6**, 2,3,4,5-Tetrachlorobiphenyl
(phototransformations of polychlorobiphenyls in Brij 58 micellar solns. in relation to soil remediation)
RN 33284-53-6 HCAPLUS
CN 1,1'-Biphenyl, 2,3,4,5-tetrachloro- (9CI) (CA INDEX NAME)



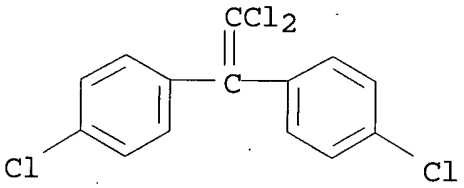
CC 60-4 (Waste Treatment and Disposal)
Section cross-reference(s): 19, 46, 74
IT **9004-95-9**, Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy-
(phototransformations of polychlorobiphenyls in Brij 58 micellar solns. in relation to soil remediation)
IT 92-52-4D, 1,1'-Biphenyl, chloro derivs., **reactions**
11097-69-1, Aroclor 1254 **33284-53-6**, 2,3,4,5-Tetrachlorobiphenyl
(phototransformations of polychlorobiphenyls in Brij 58 micellar solns. in relation to soil remediation)

L71 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1998:137232 Document No. 128:267091 Induction of forward mutations at the thymidine kinase locus of mouse lymphoma cells: evidence for electrophilic and non-electrophilic mechanisms. Henry, B.; Grant, S. G.; Klopman, G.; Rosenkranz, H. S. (260 Kappa Drive, Department of Environmental and Occupational Health, University of Pittsburgh, Pittsburgh, PA, 15238, USA). Mutation Research, 397(2), 313-335 (English) 1998. CODEN: MUREAV. ISSN: 0027-5107. Publisher: Elsevier Science B.V..
AB A database of 209 chems. tested for induction of forward mutations at the heterozygous thymidine kinase (TK.+-.) locus in L5178Y mouse lymphoma cells was analyzed for structure-activity relationships

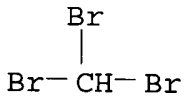
using the MultiCASE expert system. Consistent with evidence of several contributing biol. mechanisms, these studies suggest that such mutations may occur by more than one mechanism. As might be expected, there was evidence for a component involving direct electrophilic attack on the cellular DNA, in a manner previously established as causative in the induction of mutations in Salmonella. In addn., however, there was also strong evidence for another mechanism or mechanisms involving chromosome missegregation, cellular toxicity or an alternate site of action, such as the microtubules.

IT **72-55-9**, biological studies **75-25-2**, Bromoform **76-01-7**, Pentachloroethane **76-44-8**, Heptachlor **79-01-6**, Trichloroethylene, biological studies **630-20-6 3322-93-8**, 1-(1,2-Dibromoethyl)-3,4-dibromocyclohexane **9002-92-0**
(forward mutations induction at the thymidine kinase locus of mouse lymphoma cells - evidence for electrophilic and non-electrophilic mechanisms)

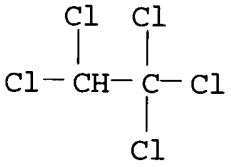
RN 72-55-9 HCAPLUS
CN Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



RN 75-25-2 HCAPLUS
CN Methane, tribromo- (8CI, 9CI) (CA INDEX NAME)

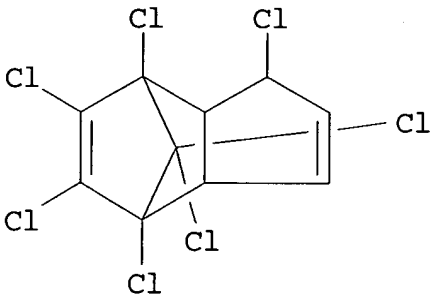


RN 76-01-7 HCAPLUS
CN Ethane, pentachloro- (8CI, 9CI) (CA INDEX NAME)

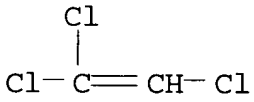


RN 76-44-8 HCAPLUS

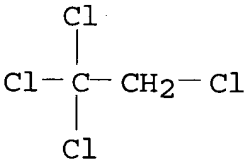
CN 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9CI) (CA INDEX NAME)



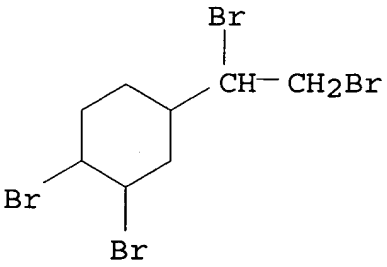
RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



RN 630-20-6 HCAPLUS
CN Ethane, 1,1,1,2-tetrachloro- (8CI, 9CI) (CA INDEX NAME)

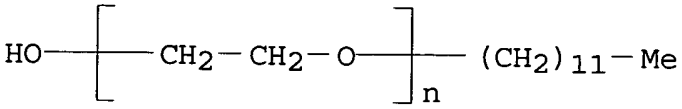


RN 3322-93-8 HCAPLUS
CN Cyclohexane, 1,2-dibromo-4-(1,2-dibromoethyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI)

(CA INDEX NAME)



CC 4-6 (Toxicology)
Section cross-reference(s): 3, 7

IT DNA
(**reactivity**; forward mutations induction at the thymidine kinase locus of mouse lymphoma cells - evidence for electrophilic and non-electrophilic mechanisms)

IT 50-55-5, Reserpine 50-81-7, L-Ascorbic acid, biological studies 51-03-6, Piperonyl butoxide 51-79-6, Urethane 52-68-6, Trichlorfon 53-96-3, 2-Acetylaminofluorene 54-31-9, Furosemide 54-85-3, Isoniazid 55-86-7, Nitrogen mustard 56-49-5, 3-Methylcholanthrene 56-57-5, 4-Nitroquinoline-1-oxide 56-72-4, Coumaphos 57-50-1, Sucrose, biological studies 57-97-6, 9,10-Dimethyl-1,2-benzanthracene 58-93-5, Hydrochlorothiazide 59-42-7, Phenylephrine 59-87-0, Nitrofurazone 60-54-8, Tetracycline 60-57-1, Dieldrin 61-82-5, 3-Aminotriazole 62-50-0, Ethyl methanesulfonate 62-53-3, Aniline, biological studies 62-73-7, Dichlorvos 65-61-2, Acridine orange 66-27-3, Methyl methanesulfonate 67-20-9, Nitrofurantoin 68-12-2, Dimethylformamide, biological studies 69-65-8, Mannitol 69-74-9, Cytarabine hydrochloride 70-25-7, N-Methyl-N'-nitro-N-nitrosoguanidine 71-43-2, Benzene, biological studies 72-20-8, Endrin **72-55-9**, biological studies 75-09-2, Methylene chloride, biological studies **75-25-2**, Bromoform 75-27-4, Bromodichloromethane 75-35-4, Vinylidene chloride, biological studies 75-56-9, Propylene oxide, biological studies 75-65-0, tert-Butyl alcohol, biological studies **76-01-7**, Pentachloroethane **76-44-8**, Heptachlor 78-42-2, Tris(2-ethylhexyl)phosphate 78-59-1, Isophorone 78-87-5 **79-01-6**, Trichloroethylene, biological studies 79-11-8, Chloracetic acid, biological studies 79-57-2, Oxytetracycline 80-05-7, Bisphenol A, biological studies 80-08-0, 4,4'-Sulfonyldianiline 80-62-6, Methyl methacrylate 83-79-4, Rotenone 85-68-7, Butyl benzyl phthalate 86-30-6, Diphenylnitrosamine 86-73-7, Fluorene 87-29-6, Cinnamyl anthranilate 88-06-2, 2,4,6-Trichlorophenol 88-96-0, Phthalamide 89-25-8, 1-Phenyl-3-methyl-5-pyrazolone 89-78-1 91-08-7, 2,6-Toluene diisocyanate 91-22-5, Quinoline, biological studies 91-80-5, Methapyrilene 91-81-6, Tripelennamine 92-52-4D, Biphenyl, bromo derivs. 92-87-5, Benzidine 92-93-3, 4-Nitrobiphenyl 94-20-2, Chlorpropamide 94-59-7, Safrole 95-50-1, 1,2-Dichlorobenzene 95-51-2, o-Chloroaniline 95-53-4, o-Toluidine, biological studies 95-79-4, 5-Chloro-o-toluidine 95-86-3, 2,4-Diaminophenol 96-12-8 96-31-1, N,N'-Dimethylurea 96-45-7, N,N'-Ethylenethiourea 97-53-0, Eugenol 97-77-8,

Disulfiram 98-01-1, Furfural, biological studies 99-56-9, 4-Nitro-o-phenylenediamine 99-57-0, 2-Amino-4-nitrophenol 100-02-7, p-Nitrophenol, biological studies 100-41-4, Ethyl benzene, biological studies 100-44-7, Benzyl chloride, biological studies 100-51-6, Benzyl alcohol, biological studies 100-52-7, Benzaldehyde, biological studies 101-77-9, 4,4'-Methylenedianiline 101-80-4, 4,4'-Oxydianiline 101-90-6, Diglycidyl resorcinol ether 103-23-1, Di(2-ethylhexyl)adipate 105-11-3, p-Benzoquinone dioxime 105-55-5, 1,3-Diethyl-2-thiourea 105-87-3, Geranyl acetate 106-40-1, p-Bromoaniline 106-46-7, 1,4-Dichlorobenzene 106-47-8, p-Chloroaniline, biological studies 106-88-7 106-99-0, 1,3-Butadiene, biological studies 107-07-3, Ethylene chlorohydrin, biological studies 107-21-1, Ethylene glycol, biological studies 108-46-3, Resorcinol, biological studies 108-60-1, Bis(2-chloro-1-methylethyl)ether 108-78-1, Melamine, biological studies 108-88-3, Toluene, biological studies 108-90-7, Chlorobenzene, biological studies 108-94-1, Cyclohexanone, biological studies 108-95-2, Phenol, biological studies 109-69-3, N-Butyl chloride 110-00-9, Furan 110-86-1, Pyridine, biological studies 111-30-8, Glutaraldehyde 115-07-1, Propylene, biological studies 115-28-6, Chlorendic acid 115-29-7, Endosulfan 120-61-6, Dimethyl terephthalate 120-83-2, 2,4-Dichlorophenol 121-79-9, Propyl gallate 121-88-0, 2-Amino-5-nitrophenol 123-30-8 123-31-9, Hydroquinone, biological studies 123-91-1, 1,4-Dioxane, biological studies 124-48-1, Chlorodibromomethane 124-64-1 126-92-1 127-18-4, Tetrachloroethylene, biological studies 127-69-5, Sulfisoxazole 128-37-0, BHT, biological studies 131-17-9, Diallyl phthalate 133-06-2, Captan 135-88-6 136-40-3, Phenazopyridine hydrochloride 136-77-6, 4-Hexylresorcinol 137-30-4, Ziram 140-11-4, Benzyl acetate 140-88-5, Ethyl acrylate 142-28-9, 1,3-Dichloropropane 148-18-5, Sodium diethyldithiocarbamate 148-24-3, 8-Hydroxyquinoline, biological studies 149-30-4, 2-Mercaptobenzothiazole 150-38-9, Trisodium EDTA 150-68-5, Monuron 151-21-3, SDS, biological studies 271-89-6, 2,3-Benzofuran 298-18-0 320-67-2, 5-Azacytidine 333-41-5, Diazinon 366-70-1, Natulan 434-13-9, Lithocholic acid 505-60-2, Mustard gas 510-15-6, Chlorobenzilate 513-37-1, .beta.,.beta.-Dimethylvinyl chloride 518-47-8, Acid yellow 73 542-75-6, 1,3-Dichloropropene 542-78-9, Malonaldehyde 563-47-3, 3-Chloro-2-methyl-1-propene 569-61-9, C.I. Basic red 9 584-84-9 597-25-1, Dimethyl morpholinophosphoramidate 598-55-0, Methyl carbamate 607-57-8, 2-Nitrofluorene 609-20-1, 2,6-Dichloro-p-phenylenediamine 624-83-9, Methyl isocyanate **630-20-6** 706-87-6 842-07-9, C.I. Solvent yellow 14 1163-19-5 1212-29-9, 1,3-Bis(cyclohexyl)thiourea 1239-45-8, Ethidium bromide 1596-84-5, Succinic acid 2,2-dimethylhydrazide 1634-78-2, Malaoxone 1746-01-6, TCDD 1825-21-4, Pentachloroanisole 1897-45-6 1910-42-5, Methyl viologen 1936-15-8 2164-17-2, Fluometuron 2185-92-4, 2-Biphenylamine hydrochloride 2432-99-7 2438-88-2, 2,3,5,6-Tetrachloro-4-nitroanisole 2475-45-8, C.I. Disperse blue 1 2489-77-2

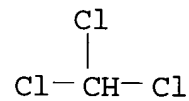
2783-94-0, FD and C yellow 6 2784-94-3, HC blue no. 1 2832-40-8, C.I. Disperse yellow 3 3105-97-3, Hycanthone 3131-60-0, 6-Azacytidine **3322-93-8**, 1-(1,2-Dibromoethyl)-3,4-dibromocyclohexane 3546-10-9, Phenesterine 3567-69-9, C.I. Acid red 14 4460-86-0, 2,4,5-Trimethoxy benzaldehyde 5160-02-1 5307-14-2, 2-Nitro-p-phenylenediamine 5989-27-5, D-Limonene 6959-48-4, 3-Chloromethylpyridine hydrochloride 7177-48-2, Ampicillin trihydrate 7320-37-8, 1,2-Epoxyhexadecane **9002-92-0** 12789-03-6, Chlordane 15481-70-6, 2,6-Toluenediamine dihydrochloride 17924-92-4, Zearalenone 18883-66-4, Streptozotocin 21739-91-3, Cytembena 28322-02-3, N-4-Fluorenylacetamide 33229-34-4, HC blue no. 2 41372-08-1 54150-69-5, 2,4-Dimethoxyaniline hydrochloride 65589-70-0, Acriflavine
(forward mutations induction at the thymidine kinase locus of mouse lymphoma cells - evidence for electrophilic and non-electrophilic mechanisms)

L71 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1996:379316 Document No. 125:34453 Recovery of epoxidized block copolymers by steam stripping. Oshino, Yasuhiro; Ootsuka, Yoshihiro (Daicel Chem, Japan). Jpn. Kokai Tokkyo Koho JP 08059734 A2 19960305 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-191612 19940815.

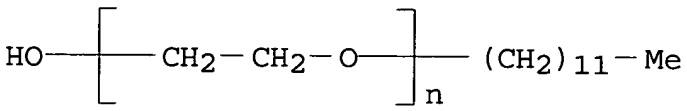
AB Slurries or solns. of epoxidized (hydrogenated) arom. vinyl compd.-conjugated diene block copolymers in org. solvents are subjected to steam stripping in the presence of surfactants to recover the polymers. Thus, a soln. of epoxidized TR 2000 (styrene-butadiene-styrene block copolymer) (I) in AcOEt was subjected to steam stripping in the presence of Emulgen PP 290 (nonionic surfactant) at 90.degree. to recover I without adhesion to the inner wall of the **reactor** or the stirring paddle.

IT **67-66-3**, Chloroform, uses **9002-92-0**, Emulgen 147
(surfactants in recovery of epoxidized block copolymers in org. solvents by steam stripping)

RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)

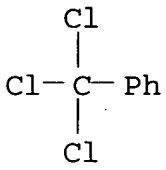


RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

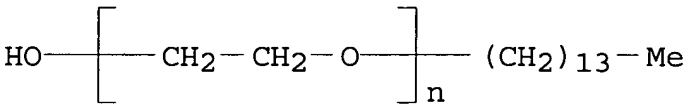


IC ICM C08F006-00
ICS C08F236-10; C08G059-34
CC 35-10 (Chemistry of Synthetic High Polymers)
IT **67-66-3**, Chloroform, uses 108-88-3, Toluene, uses 110-54-3, Hexane, uses 110-82-7, Cyclohexane, uses 112-00-5, Quartamin 24P 141-78-6, Ethyl acetate, uses 1330-20-7, Xylene, uses **9002-92-0**, Emulgen 147 9003-11-6, Emulgen PP 290 9004-98-2, Emulgen 408 9016-45-9, Emulgen 985 88984-51-4, Electrostripper F
(surfactants in recovery of epoxidized block copolymers in org. solvents by steam stripping)

L71 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1995:343404 Document No. 122:169044 Biochemical degradability of selected organic compounds; part 2. Wotzka, von Joerg; Pfitzner, Steffi; Giest, Baerbel (Bundesanstalt fur Gewasserkunde, Aussenstelle Berlin, Berlin, 12439, Germany). Deutsche Gewaesserkundliche Mitteilungen, 38(1-2), 10-17 (German) 1994. CODEN: DGMTAO. ISSN: 0012-0235.
AB The biodegradability of a substance is a relevant characteristic to assess its behavior in wastewater treatment, its accumulation in the environment, and the water pollution hazard it poses. Dissimilation of org. compds. was examd. in lab.-scale wastewater treatment plants and in respirometers (Sapromat, Warburg app.) by adapted and non-adapted microorganisms. In evaluating the results, substances were assigned to 1 of 4 groups (A-D) on the basis of the BOD:COD ratio or calcd. theor. BOD. A total of 178 selected substances were tested; results are summarized. These 4 groups were established on the basis of the chem. structure of the compds. A total of 20 figures display degrdn. curves measured by respirometer, reflecting the effect of adaptation, dry sludge content, **reaction** time, and delayed dissimilation. Distribution of the tested chems. among the 4 groups is: biochem. easily degradable (27 substances, 15%); biochem. degradable (60 substances, 34%); biochem. hardly degradable (11 substances, 6%); and non-biodegradable (80 substances, 45%). Alcs., esters, org. acids, phenooxyacids, and surfactants belong to the biochem. easily degradable or biochem. degradable substances, Groups A and B, whereas org. Sn compds., sulfonic acids, triazine, and most pesticides were among the non-biodegradable compds.
IT **98-07-7**, Benzotrichloride **27306-79-2**
(biochem. degrdn. org. compds. in lab.-scale wastewater treatment plants and respirometers by adapted and non-adapted microorganisms)
RN 98-07-7 HCAPLUS
CN Benzene, (trichloromethyl)- (9CI) (CA INDEX NAME)



RN 27306-79-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-tetradecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



CC 60-2 (Waste Treatment and Disposal)
Section cross-reference(s): 5, 45, 46, 61
IT 50-33-9, Phenylbutazone, biological studies 51-28-5, 2,4-Dinitrophenol, biological studies 52-51-7, Bronopol 59-50-7, p-Chloro-m-cresol 60-51-5, Dimethoate 61-82-5, Amitrol 62-73-7, Dichlorvos 63-25-2, Carbaryl 70-30-4, Hexachlorophene 75-87-6, Chloral 81-11-8, Flavonic acid 93-65-2, 2-(4-Chloro-2-methylphenoxy)-propionic acid 94-74-6, 4-Chloro-2-methyl-phenoxyacetic acid 94-75-7, 2,4-Dichlorophenoxyacetic acid, biological studies 94-81-5, 4-(4-Chloro-2-methylphenoxy)butyric acid 94-82-6, 4-(2,4-Dichloro-phenoxy)butyric acid 95-55-6, o-Aminophenol 95-57-8, o-Chlorophenol 96-91-3, 4,6-Dinitro-2-aminophenol **98-07-7**, Benzotrichloride 98-11-3D, Benzene sulfonic acid, alkyl derivs. 98-47-5, m-Nitrobenzene sulfonic acid 98-95-3, biological studies 99-57-0, 2-Amino-4-nitrophenol 100-02-7, p-Nitrophenol, biological studies 100-17-4 101-21-3, Chlorpropham 101-42-8, Fenuron 103-90-2, 4-Acetaminophenol 104-74-5, Dodecylpyridinium chloride 106-48-9, p-Chlorophenol 108-77-0, Cyanurchloride 108-90-7, Chlorobenzene, biological studies 108-94-1, Cyclohexanone, biological studies 110-82-7, Cyclohexane, biological studies 111-30-8, Glutardialdehyde 116-52-9, Dichloral urea 119-19-7, Phenyl .gamma.-acid 120-36-5, 2-(2,4-Dichlorophenoxy)-propionic acid 120-83-2, 2,4-Dichlorophenol 121-47-1, m-Aminobenzene sulfonic acid 121-57-3, p-Aminobenzene sulfonic acid 122-34-9, Simazine 122-42-9, Propham 122-87-2, p-Hydroxyphenylglycine 123-30-8, p-Aminophenol 127-06-0 127-81-1, Solupront 135-19-3, 2-Naphthalenol, biological studies 137-26-8, Thiuram 139-40-2, Propazine 149-30-4, 2(3H)-Benzothiazolethione 150-68-5, Monuron 287-92-3, Cyclopentane 298-00-0, Parathionmethyl 330-54-1, Diuron 330-55-2, Linuron 480-96-6, Benzofuroxan 498-66-8, Norbornene 534-52-1 591-27-5, m-Aminophenol 645-62-5

705-62-4 834-12-8, Ametryn 873-50-7, 1-Carbamoyl-3-methylpyrazole 973-21-7, Dinobuton 999-81-5 1007-36-9, Defenuron 1014-69-3, Desmetryn 1570-64-5, p-Chloro-o-cresol 1689-83-4, Ioxynil 1689-84-5, Bromoxynil 1712-64-7, Isopropylnitrate 1746-81-2, Monolinuron 1836-75-5, Nitrofen 1912-24-9, Atrazine 2164-08-1, Lenacil 2828-42-4, Proximpham 3060-89-7, Metobromuron 3408-97-7, Bromfenuron 4499-99-4, Triethylene glycol diethylether 5234-68-4, Carboxin 5629-51-6, Dinobutonmethyl 6920-97-4, 1,2-Dimethyl-5-vinylpyridinium methylsulfate 7287-19-6, Prometryn 7398-69-8, Dimethyl-diallyl-ammonium chloride 7540-60-5, Cyclohexylsulfamate 9016-45-9 10265-92-6, Methamidophos 13684-63-4, Phenmedipham 19961-72-9 25154-42-1, Chlorobutane 25366-23-8, Thiazafluron 26377-90-2 **27306-79-2** 28730-17-8, Methfuroxam 29756-37-4, Chloroheptane 39549-27-4 66719-08-2 78846-76-1 88265-20-7, Trizin 91315-15-0, Aldimorph 161544-84-9, Tridiron
(biochem. degrdn. org. compds. in lab.-scale wastewater treatment plants and respirometers by adapted and non-adapted microorganisms)

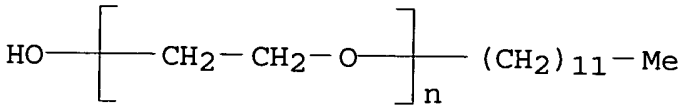
L71 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1994:662596 Document No. 121:262596 Photodechlorination of Polychlorobenzene Congeners in Surfactant Micelle Solutions. Chu, Wei; Jafvert, Chad T. (School of Civil Engineering, Purdue University, West Lafayette, IN, 47907, USA). Environmental Science and Technology, 28(13), 2415-22 (English) 1994. CODEN: ESTHAG. ISSN: 0013-936X.

AB Photochem. **reactions** of polychlorobenzene congeners in aq. solns. contg. surfactant micelles were investigated. All photolysis expts. were performed with a Rayonet RPR-100 merry-go-round photoreactor utilizing 253.7-nm monochromatic UV lamps. Photoredn. through photodechlorination was the main decay pathway in which lesser chlorinated congeners and benzene were formed as intermediates. Final products included H+ and Cl- in approx. stoichiometric amts. In addn., some minor pathways were obsd. including photochlorination (the reverse **reaction**), photoisomerization, and finally photohydrolysis, through which phenol was found. The quantum yield for the decay of hexachlorobenzene was about an order of magnitude greater in micellar solns. than in water alone. Several H sources were investigated with NaBH4 and is a promising rate enhancer at elevated concns.

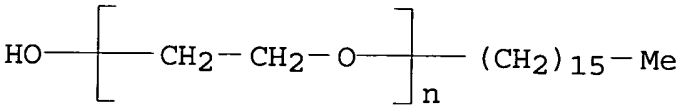
IT **9002-92-0**, Brij 35 **9004-95-9**, Brij 58
(photodechlorination of polychlorobenzene congeners in surfactant micelle solns.)

RN 9002-92-0 HCAPLUS

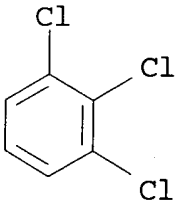
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



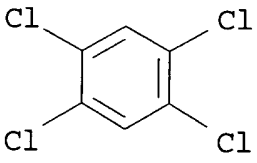
RN 9004-95-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



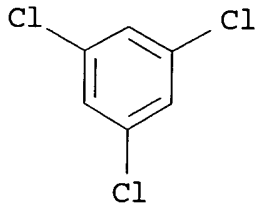
IT **87-61-6**, 1,2,3-Trichlorobenzene **95-94-3**, 1,2,4,5-Tetrachlorobenzene **108-70-3**, 1,3,5-Trichlorobenzene **120-82-1**, 1,2,4-Trichlorobenzene **608-93-5**, Pentachlorobenzene **634-66-2**, 1,2,3,4-Tetrachlorobenzene **634-90-2**, 1,2,3,5-Tetrachlorobenzene
(photodechlorination of polychlorobenzene congeners in surfactant micelle solns.)
RN 87-61-6 HCAPLUS
CN Benzene, 1,2,3-trichloro- (8CI, 9CI) (CA INDEX NAME)



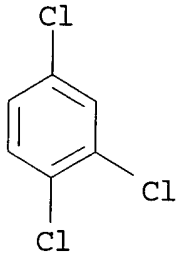
RN 95-94-3 HCAPLUS
CN Benzene, 1,2,4,5-tetrachloro- (8CI, 9CI) (CA INDEX NAME)



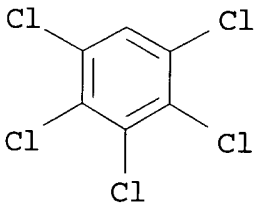
RN 108-70-3 HCAPLUS
CN Benzene, 1,3,5-trichloro- (8CI, 9CI) (CA INDEX NAME)



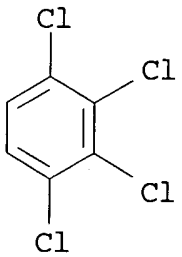
RN 120-82-1 HCAPLUS
CN Benzene, 1,2,4-trichloro- (8CI, 9CI) (CA INDEX NAME)



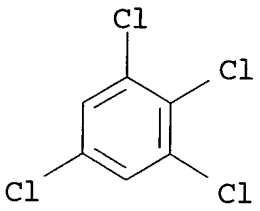
RN 608-93-5 HCAPLUS
CN Benzene, pentachloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 634-66-2 HCAPLUS
CN Benzene, 1,2,3,4-tetrachloro- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 634-90-2 HCAPLUS
CN Benzene, 1,2,3,5-tetrachloro- (7CI, 8CI, 9CI) (CA INDEX NAME)



CC 60-2 (Waste Treatment and Disposal)
Section cross-reference(s): 61

IT **9002-92-0**, Brij 35 **9004-95-9**, Brij 58 9005-64-5, Tween 20 9005-65-6, Tween 80
(photodechlorination of polychlorobenzene congeners in surfactant micelle solns.)

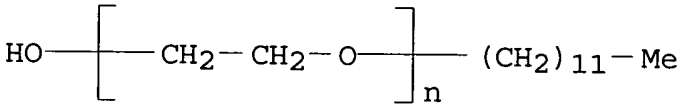
IT **87-61-6**, 1,2,3-Trichlorobenzene 95-50-1, 1,2-Dichlorobenzene **95-94-3**, 1,2,4,5-Tetrachlorobenzene 106-46-7, 1,4-Dichlorobenzene **108-70-3**, 1,3,5-Trichlorobenzene 108-90-7, Monochlorobenzene, occurrence 118-74-1, Hexachlorobenzene **120-82-1**, 1,2,4-Trichlorobenzene 541-73-1, 1,3-Dichlorobenzene **608-93-5**, Pentachlorobenzene **634-66-2**, 1,2,3,4-Tetrachlorobenzene **634-90-2**, 1,2,3,5-Tetrachlorobenzene
(photodechlorination of polychlorobenzene congeners in surfactant micelle solns.)

L71 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1993:549321 Document No. 119:149321 Effect of substituents and environment on the photochromic properties of spiropyrans. Tomioka, Hideo; Zhao, Xiutai (Fac. Eng., Mie Univ., Tsu, 514, Japan). Nippon Kagaku Kaishi (7), 884-90 (Japanese) 1993. CODEN: NKAKB8. ISSN: 0369-4577.

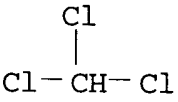
AB 1',3',3'-Trimethyl-6-nitrospiro[2H-1-benzopyran-2,2'-indolines] (SPs) having methoxy groups on the indoline ring were prepd. and their photochromic properties were investigated in org. solvents and in films. SPs showed normal photochromism in the less polar solvents, while reverse photochromism occurred as the solvent polarity increased. Linear relationship between electronic transition energy (EMC) of the colored species and log k was obsd. (k = the rate const. for coloration or decoloration process). In micellar soln., .lambda.max underwent significant blue shift and no linear relationship between EMC and log k was obsd. In the films of PMMA or polyion complexes of poly(styrene sulfonate) and distearyldimethylammonium chloride, normal photochromism was obsd., but the rate of decoloration was considerably smaller than that obsd. for the decoloration in org. solvents of similar polarity, indicating that the decoloration process was controlled not only by polarity but also by viscosity of the environment.

IT **9002-92-0**, ET 170
(photochromic properties of spiropyrans in micelle soln. of)

RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **67-66-3**, Chloroform, properties
(solvent effect of, on photochromic properties of spiropyrans)
RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)



CC 74-1 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST photochromism spiropyran solvent micelle polymer film; photochromic **reaction** spiropyran substituent medium effect; spirobenzopyranindoline deriv photochromism medium polarity viscosity
IT 1119-94-4, Dodecyltrimethylammonium bromide **9002-92-0**, ET 170 25155-30-0, Sodium dodecylbenzenesulfonate
(photochromic properties of spiropyrans in micelle soln. of)
IT 92990-88-0P, 1,3,3-Trimethyl-5,7-dimethoxy-2-methyleneindole 121807-35-0P, 5,7-Dimethoxy-2,3,3-trimethyl-3H-indole 149987-73-5P, 1,2,3,3-Tetramethyl-5,7-dimethoxy-3H-indolium iodide
(prepn. and **reaction** of, in synthesis of photochromic spiropyrans)
IT 64-17-5, Ethanol, properties **67-66-3**, Chloroform, properties 123-91-1, 1,4-Dioxane, properties
(solvent effect of, on photochromic properties of spiropyrans)

L71 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1992:565381 Document No. 117:165381 Response of the ke test to NCI/NTP-screened chemicals. II. Genotoxic carcinogens and non-genotoxic non-carcinogens. Bakale, George; McCreary, Richard D. (Dep. Radiol., Case West. Reserve Univ., Cleveland, OH, 44106-5000, USA). Carcinogenesis, 13(8), 1437-45 (English) 1992. CODEN: CRNGDP. ISSN: 0143-3334.
AB A physicochem. carcinogen-screening test was used to measure the rate consts. of electron attachment, kes, of 105 chems. that had been screened in long-term rodent bioassays and short-term in vitro tests by the NCI/NTP. In the ke test, a pulse-cond. technique is used to generate and monitor the decay of excess electrons that serve as nucleophilic surrogates for the target tissue of rodents.

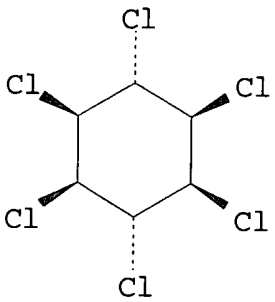
Of the 61 chems. that had been found to be rodent carcinogens as well as Salmonella mutagens, 36 yield kes that are equal to or greater than the diffusion-controlled ke of carbon tetrachloride and are considered to be pos. ke test responses. In contrast, 29 of the remaining 44 chems. that are putative non-carcinogens and non-mutagens yield kes that are neg. ke test responses. These results are combined with the ke responses of 46 non-mutagenic carcinogens and 20 mutagenic non-carcinogens that were reported earlier and are evaluated to det. the degree to which the measure of electron-accepting capacity that ke provides complements or overlaps the electrophilicity or DNA **reactivity** of chems. that is indicated by pos. mutagenicity responses in the Ames Salmonella tester strains or by pos. structural alerts, S/As, of the chems. The combined ke test results indicate that the overall predictivity of the ke test is comparable to and complements the Ames Salmonella test and S/As in identifying rodent carcinogens. Moreover, the electrons serve as non-discriminate nucleophilic targets for both genotoxic and non-genotoxic electron-accepting mols. and appear to attach with equal efficiency to carcinogens that are active in various tissues of rodents. This property of excess electrons suggests that the predictivity of the ke test could be enhanced by combining the measured ke with an appropriate lipophilicity or pharmacokinetic parameter. A prechem. electron-transfer step that had been proposed to precede chem. interactions between the carcinogen and target tissue is discussed in light of recent developments in electron-donor/-acceptor chem. and in the application of structure-activity relationships to identify carcinogens.

IT **58-89-9**, Lindane **9002-92-0**
(electron attachment rate const. of, genotoxic and nongenotoxic carcinogen screening in relation to)

RN 58-89-9 HCAPLUS

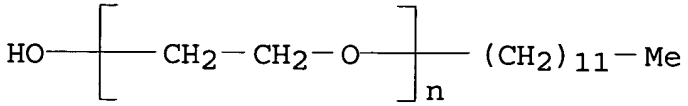
CN Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 9002-92-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



CC 4-1 (Toxicology)

IT 51-03-6, Piperonyl butoxide 56-72-4, Coumaphos **58-89-9**, Lindane 59-96-1, Phenoxybenzamine 62-73-7, Dichlorvos 64-77-7, Tolbutamide 69-65-8, D-Mannitol 72-20-8, Endrin 72-43-5, Methoxychlor 75-35-4, Vinylidene chloride, biological studies 76-87-9, Triphenyltin hydroxide 77-79-2, 3-Sulfolene 78-87-5, 1,2-Dichloropropane 82-28-0, 1-Amino-2-methylanthraquinone 82-68-8, Pentachloronitrobenzene 85-44-9, 1,3-Isobenzofurandione 88-96-0, Phthalamide 89-25-8 90-04-0, o-Anisidine 90-41-5, 2-Aminobiphenyl 90-94-8, Michler's ketone 91-93-0 94-20-2, Chlorpropamide 94-52-0, 6-Nitrobenzimidazole 95-06-7, Sulfallate 95-50-1, o-Dichlorobenzene 95-53-4, biological studies 95-74-9, 3-Chloro-p-toluidine 95-80-7, 2,4-Diaminotoluene 95-83-0, 4-Chloro-o-phenylenediamine 96-12-8, 1,2-Dibromo-3-chloropropane 97-77-8 99-55-8, 5-Nitro-o-toluidine 99-59-2, 5-Nitro-o-anisidine 101-05-3, Anilazine 101-54-2, N-Phenyl-p-phenylenediamine 101-77-9 101-80-4 103-33-3, Azobenzene 103-85-5, 1-Phenyl-2-thiourea 105-11-3, p-Quinone dioxime 105-60-2, biological studies 105-87-3, Geranyl acetate 106-93-4 107-06-2, 1,2-Dichloroethane, biological studies 108-60-1, Bis(2-chloro-1-methylethyl)ether 108-95-2, Phenol, biological studies 114-86-3, Phenformin 116-06-3, Aldicarb 117-79-3, 2-Aminoanthraquinone 118-92-3 119-34-6, 4-Amino-2-nitrophenol 119-53-9, Benzoin 120-71-8, p-Cresidine 121-14-2, 2,4-Dinitrotoluene 121-66-4, 2-Amino-5-nitrothiazole 121-75-5, Malathion 122-66-7, Hydrazobenzene 124-48-1, Chlorodibromomethane 126-72-7, Tris(2,3-dibromopropylphosphate) 127-69-5, Sulfisoxazole 128-37-0, Butylated hydroxytoluene, biological studies 129-15-7, 2-Methyl-1-nitroanthraquinone 132-32-1, 3-Amino-9-ethylcarbazole 135-20-6, Cupferron 139-65-1, 4,4'-Thiodianiline 139-94-6, Nithiazide 156-10-5, p-Nitrosodiphenylamine 299-42-3 303-34-4, Lasiocarpine 333-41-5, Diazinon 434-13-9 536-33-4, Ethionamide 542-75-6, 1,3-Dichloropropene 584-84-9 602-87-9, 5-Nitroacenaphthene 609-20-1, 2,6-Dichloro-p-phenylenediamine 842-07-9, Solvent yellow 14 868-85-9, Dimethyl hydrogenphosphite 968-81-0, Acetohexamide 999-81-5, 2-Chloroethyltrimethyl ammonium chloride 1212-29-9, N,N'-Dicyclohexylthiourea 1582-09-8, Trifluralin 1634-78-2, Malaoxon 1777-84-0 1836-75-5, Nitrofen 1936-15-8, Acid orange 10 1955-45-9, Pivalolactone 2243-62-1, 1,5-Naphthalenediamine 2438-88-2, 2,3,5,6-Tetrachloro-4-nitroanisole 2602-46-2, Direct blue 6 2784-94-3 2832-40-8, Disperse yellow 3 3567-69-9, Acid red 14 4377-33-7, 2-Chloromethylpyridine 5131-60-2, 4-Chloro-m-phenylenediamine 5307-14-2, 2-Nitro-p-phenylenediamine 8001-35-2, Toxaphene **9002-92-0** 15356-70-4 17026-81-2,

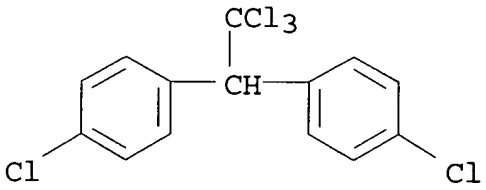
3-Amino-4-ethoxyacetanilide 21739-91-3, Cytembena 62340-22-1, Disperse blue
(electron attachment rate const. of, genotoxic and nongenotoxic carcinogen screening in relation to)

L71 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1992:400277 Document No. 117:277 Mechanism of allergic cross-**reactions**. I. Multispecific binding of ligands to a mouse monoclonal anti-DNP IgE antibody. Varga, Janos M.; Kalchschmid, Gertrud; Klein, Georg F.; Fritsch, Peter (Dep. Dermatol., Univ. Innsbruck, Innsbruck, 6020, Austria). Molecular Immunology, 28(6), 641-54 (English) 1991. CODEN: MOIMD5. ISSN: 0161-5890.

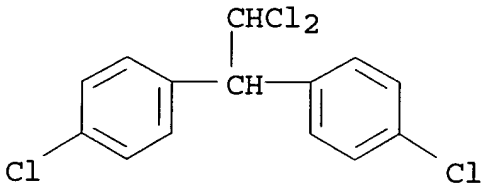
AB A recently developed solid-phase binding assay was used to investigate the specificity of ligand binding to a mouse monoclonal anti-dinitrophenyl IgE (I). All DNP-amino acids, that were tested inhibited the binding of the radio-labeled I to DNP covalently attached to polystyrene microplates; however, the concn. for 50% inhibition varied within four orders of magnitude, DNP-L-serine being the most and DNP-L-proline the least potent inhibitor. In addn. to DNP analogs, a large no. of drugs and other compds. were tested for their ability to compete with DNP for the binding site of I. At the concn. used for screening, 59% of compds. had no significant inhibition; 19% inhibited the binding of I more than 50%. Several families of compds. (tetracyclines, polymyxins, phenothiazines, salicylates, and quinones) that were effective competitors were found. Within these families, changes in the functional groups attached to the family stem had major effects on the affinity of ligand binding. The occurrence frequencies of interactions of ligands with I is in good agreement with the semi-empirical model for multispecific antibody-ligand interactions.

IT **50-29-3**, DDT, biological studies **72-54-8**
2810-69-7 9002-92-0 23488-38-2
39568-70-2
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanism in relation to)

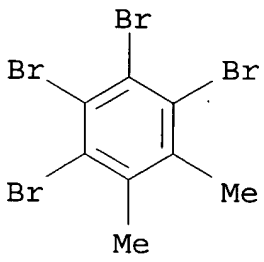
RN 50-29-3 HCAPLUS
CN Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



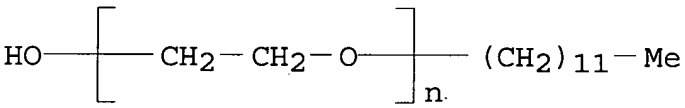
RN 72-54-8 HCAPLUS
CN Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



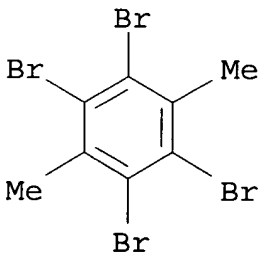
RN 2810-69-7 HCAPLUS
CN Benzene, 1,2,3,4-tetrabromo-5,6-dimethyl- (9CI) (CA INDEX NAME)



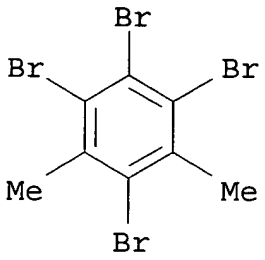
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 23488-38-2 HCAPLUS
CN Benzene, 1,2,4,5-tetrabromo-3,6-dimethyl- (9CI) (CA INDEX NAME)

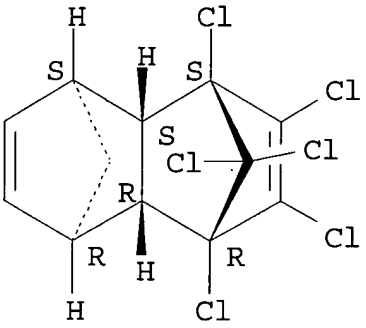


RN 39568-70-2 HCAPLUS
CN Benzene, 1,2,3,5-tetrabromo-4,6-dimethyl- (9CI) (CA INDEX NAME)



IT **309-00-2**, Aldrin
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanisms in relation to)
RN 309-00-2 HCAPLUS
CN 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1R,4S,4aS,5S,8R,8aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 1-3 (Pharmacology)
Section cross-reference(s): 4, 15
ST antibody drug interation cross **reaction**; allergy immediate hypersensitivity antibody ligand; IgE ligand cross **reaction**
IT Antibiotics
Chemicals
Pharmaceuticals
Ligands
Quinones
Sulfonamides
(antibodies to dinitrophenol binding by, allergic cross-**reaction** mechanism in relation to)
IT Hemoglobins
Keratins
Saponins
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanism in relation to)
IT Immunoglobulins
(E, monoclonal, to dinitrophenol, drugs and other chem. binding to, allergic cross-**reaction** mechanism in relation to)

IT Molecular structure-biological activity relationship
(antibody-binding, allergic cross-**reaction**, of drugs and other chems.)

IT Amino acids, biological studies
(dinitrophenyl, antibodies to dinitrophenol binding by, allergic cross-**reaction** mechanism in relation to)

IT 60-54-8D, derivs. 69-72-7D, Salicylic acid, derivs. 92-84-2D, Phenothiazine, derivs. 1406-11-7D, Polymyxin, derivs.
(antibodies to dinitrophenol binding by, allergic cross-**reaction** mechanism in relation to)

IT 50-02-2 50-10-2 50-12-4, Mesantoin 50-18-0, Endoxan **50-29-3**, DDT, biological studies 50-33-9, Phebuzine, biological studies 50-34-0 50-44-2, Mercaptopurine 50-65-7 50-70-4, Sorbit, biological studies 51-05-8, Procaine hydrochloride 51-18-3, Tretamin 51-21-8, 5-Fluoro-uracil 51-41-2, Levarterenol 51-67-2 51-83-2 52-01-7, Spironolactone 52-49-3 52-62-0 52-86-8, Haloperidol 53-43-0 53-60-1, Promazine hydrochloride 53-86-1 54-03-5, Ustimon 54-31-9, Furosemid 54-32-0, Opilon 54-36-4, Metyrapone 54-42-2, Idoxuridine 54-49-9 54-64-8, Thimerosal 54-71-7, Pilocarpine hydrochloride 54-85-3 54-91-1, Pipobroman 54-92-2, Iproniazide 54-96-6, 3,4-Pyridinediamine 55-03-8, Sodium thyroxine 55-06-1 55-10-7 55-16-3, Scopolamine hydrochloride 55-22-1, Isonicotinic acid, biological studies 55-55-0, Metol 55-65-2 55-92-5, Methacholine 55-97-0 56-38-2, Parathion 56-55-3, Benz[a]anthracene 56-92-8 57-48-7, Levulose, biological studies 57-50-1, Saccharose, biological studies 57-53-4 57-64-7 57-66-9, Probenecid 57-83-0, Proluton, biological studies 57-87-4 57-94-3 58-14-0, Pyrimethamine 58-15-1, Pyramidon 58-20-8, Testosterone-cyclopentylpropionate 58-27-5, Menadione 58-28-6, Desipramine hydrochloride 58-32-2, Persantin 58-38-8, Prochlorperazine 58-39-9, Perphenazine 58-46-8 58-54-8 58-55-9, Theophyllin, biological studies 58-73-1, Diphenhydramine 58-74-2 58-86-6, D(+)-Xylose, biological studies 59-05-2, Methotrexate 59-06-3, Ethopabate 59-32-5, Synopen 59-33-6, Pyrilamine maleate 59-43-8, Thiamine, biological studies 59-47-2 59-63-2, Marplan 59-66-5, Diamox 59-97-2 59-99-4, Prostigmine 60-56-0, Methimazole 60-57-1, Dieldrin 60-80-0 60-81-1 60-89-9, Pacatal 60-99-1, Levomepromazine 61-12-1 61-16-5 61-25-6, Papaverine hydrochloride 61-68-7 61-96-1, Nordefrin hydrochloride 62-13-5 62-44-2, Phenacetine 62-55-5, Thioacetamide 62-59-9, Veratrine 62-68-0, Proadifen hydrochloride 63-42-3, Lactose 63-45-6, Primaquine phosphate 63-74-1, Sulfanilamide 63-92-3, Phenoxybenzamine hydrochloride 64-10-8, Phenylurea 64-47-1, Physostigmine sulfate 64-55-1, Mebutamat 64-77-7, Tolbutamide 65-19-0 65-28-1 65-29-2 65-45-2, Salicylamide 65-49-6, PAS 65-85-0, Benzoic acid, biological studies 65-86-1, Orotic acid 66-22-8, Uracil, biological studies 66-76-2 67-45-8, Furoxon 67-92-5, Dicycloverin hydrochloride 67-96-9 68-11-1, Thioglycolic acid, biological studies 68-91-7 68-94-0, Hypoxanthine 69-14-7, Trimanyl 69-65-8, Mannit 69-72-7, Salicylic acid, biological

studies 69-79-4, Maltose 69-89-6, Xanthine 69-96-5 70-30-4 71-82-9 72-14-0, Sulfathiazol **72-54-8** 72-80-0, Sterosan 76-09-5 76-20-0 76-57-3 76-61-9, Thymolblue 76-62-0 76-78-8 76-83-5 76-84-6, Triphenylcarbinol 77-03-2, Sedulon 77-04-3, 3,3-Diethyl-2,4-dioxotetrahydropyridine 77-09-8 77-21-4, Doriden 77-41-8 77-67-8 78-11-5 78-28-4 79-55-0 79-93-6, Phenaglycodol 80-49-9 80-69-3, Tartronic acid 80-71-7 80-97-7 81-07-2, Saccharine 81-23-2, Dehydrocholic acid 81-54-9 81-60-7 81-61-8 81-89-0 81-92-5, Egmol 82-66-6, Diphenadione 82-71-3 83-12-5, 2-Phenyl-1,3-indandione 83-34-1, 3-Methylindole 83-44-3, Desoxycholic acid 83-46-5 83-48-7 83-63-6, Pellidol 83-70-5, Vitamin K5 83-73-8, Diiodohydroxyquinoline 83-75-0, Euquinine 83-87-4 83-88-5, Lactoflavine, biological studies 84-02-6 84-11-7, Phenanthraquinone 84-12-8, Entobex 84-88-8, 8-Hydroxyquinoline-5-sulfonic acid 85-01-8, Phenanthrene, biological studies 86-30-6, N-Nitrosodiphenylamine 86-34-0 86-48-6, 1-Hydroxy-2-naphthoic acid 86-55-5, 1-Naphthalenecarboxylic acid 86-73-7, Fluorene 86-78-2 86-86-2, 1-Naphthylacetamide 87-41-2, Phthalide 87-51-4, 1H-Indole-3-acetic acid, biological studies 87-52-5 87-66-1, Pyrogallol 87-79-6, Sorbose 87-89-8, Inosite 88-20-0 88-67-5 88-96-0, Phthalamide 88-99-3, 1,2-Benzenedicarboxylic acid, biological studies 89-05-4, Pyromellitic acid 89-25-8 89-51-0, Homophthalic acid 89-68-9, Chlorthymol 89-86-1 90-01-7, Saligenin 90-05-1 90-15-3, 1-Naphthalenol 90-30-2 90-33-5, 4-Methyl-umbelliferone 90-43-7, [1,1'-Biphenyl]-2-ol 90-46-0, Xanthydrol 90-47-1, Xanthone 90-50-6, 3,4,5-Trimethoxycinnamic acid 90-64-2, Amygdalic acid 90-82-4 90-85-7, Benzylephedrine 90-94-8 91-01-0, Diphenylcarbinol 91-10-1 91-15-6, 1,2-Benzenedicarbonitrile 91-20-3, Naphthalene, biological studies 91-40-7 91-56-5, Isatin 91-57-6 91-60-1, 2-Naphthalenethiol 91-80-5, Methapyrilene 91-89-4, Paracotoin 92-24-0, Naphthacene 92-44-4, 2,3-Naphthalenediol 92-62-6, Proflavine 92-69-3, [1,1'-Biphenyl]-4-ol 92-71-7, PPO 92-77-3 92-88-6, [1,1'-Biphenyl]-4,4'-diol 93-04-9 93-09-4, 2-Naphthalenecarboxylic acid 93-14-1 93-18-5, Nerolin II 93-35-6, Umbelliferon 93-42-5, Thionalid 93-44-7 93-56-1, Phenylethylene glycol 93-60-7 94-13-3, Propyl-4-hydroxy benzoate 94-14-4, Cycloform 94-15-5, Larocaine 94-18-8, Nipabenzyl
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanism in relation to)

IT 94-19-9, Globucid 94-62-2, Piperine 94-67-7 95-04-5, Ectylurea 95-15-8, Thionaphthene 95-20-5 95-48-7, biological studies 95-63-6, Pseudocumene 95-80-7 95-87-4 95-93-2, Durol 96-91-3 97-05-2, Sulfosalicylic acid 97-24-5 97-65-4, biological studies 98-71-5 98-79-3, 5-Oxo-L-proline 98-92-0, 3-Pyridinecarboxamide 98-96-4, Pyrazinamide 99-06-9, biological studies 99-14-9, Tricarballylic acid 99-20-7 99-26-3, Dermatol 99-50-3, 3,4-Dihydroxybenzoic acid 99-53-6, 2-Methyl-4-nitrophenol 99-76-3, Nipagin 99-93-4 99-96-7, biological studies 100-88-9 100-97-0, biological studies 101-31-5 101-38-2 101-99-5, Phenylurethane 102-08-9, Diphenylthiourea 102-98-7,

Phenylmercuryborate 103-01-5, N-Phenylglycine 103-03-7, 1-Phenylsemicarbazide 103-16-2, Monobenzon 103-41-3, Cinnamic acid benzylester 103-82-2, Phenylacetic acid, biological studies 103-85-5, Phenylthiourea 103-90-2 104-15-4, biological studies 105-67-9 106-44-5, biological studies 106-48-9 106-49-0, p-Toluidine, biological studies 106-50-3, 1,4-Benzenediamine, biological studies 107-97-1, Sarcosine 108-39-4, m-Cresole, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-73-6, Phloroglucine 109-57-9, Thiosinamine 110-44-1 110-85-0, Piperazine, biological studies 111-20-6, Decanedioic acid, biological studies 112-47-0, 1,10-Decanediol 112-72-1, Tetradecanol 112-86-7 113-22-4, Styptanon 113-52-0 113-59-7, Taractan 114-80-7 114-86-3, Phenformin 115-24-2, Sulfonal 115-33-3 115-77-5, biological studies 116-38-1, Edrophonium-chloride 117-10-2, Istizin 117-34-0, Diphenylacetic acid 117-89-5, Trifluoperazin 118-41-2, 3,4,5-Trimethoxybenzoic acid, biological studies 118-55-8, Salol 118-57-0, Salophen 118-76-3 118-79-6 118-82-1 119-39-1, 1(2H)-Phthalazinone 119-58-4 119-90-4 119-91-5, 2,2'-Biquinoline 119-93-7 120-14-9, Veratrumaldehyde 120-18-3, 2-Naphthalenesulfonic acid 120-22-9, p-Nitrosodiethylaniline 120-46-7, Dibenzoylmethane 120-57-0, Heliotropine 120-72-9, 1H-Indole, biological studies 120-78-5 120-97-8 121-57-3 121-82-4, Hexogen 122-25-8 122-39-4, Diphenylamine, biological studies 122-59-8 122-66-7 122-69-0, Styracin 123-31-9, Hydroquinone, biological studies 123-47-7, Endoiodin 124-43-6, Ortizon 124-76-5, Isoborneol 124-87-8 125-13-3 125-33-7, Primidone 125-46-2 125-51-9 125-52-0, Oxyphencyclimine hydrochloride 125-64-4, Noludar 125-85-9, Parpanit 125-99-5, Pathilon 126-02-3, Cycrimine hydrochloride 126-27-2, Oxethazaine 126-52-3, Ethinamate 126-81-8, Dimedon 127-48-0, Tridione 128-13-2 129-00-0, Pyrene, biological studies 129-20-4, Tanderil 129-77-1 130-15-4, 1,4-Naphthalenedione 130-61-0 131-01-1, Deserpidine 131-28-2 131-49-7, Angiografin 131-73-7 132-18-3 132-53-6 132-86-5, 1,3-Naphthalenediol 133-10-8 133-32-4, 1H-Indole-3-butanoic acid 133-67-5, Trichlormethiazide 134-31-6 134-71-4, Ephetonin 135-02-4 135-19-3, 2-Naphthalenol, biological studies 135-31-9 135-44-4 135-88-6 136-38-9 136-40-3, Phenazopyridine hydrochloride 136-47-0 136-72-1, Piperic acid 136-77-6, 4-Hexylresorcine 136-82-3, Metycaine 137-26-8, Thiram 137-58-6, Xylocaine 138-14-7, Desferal 138-41-0, Benzoic acid-p-sulfamide 139-33-3, Komplexon III 139-62-8 140-22-7, Diphenylcarbazide 140-64-7 141-82-2, Malonic acid, biological studies 142-63-2, Piperazine hexahydrate 143-66-8 143-67-9, Vinblastine sulfate 143-92-0, Tropenzilium bromide 144-75-2, Diasone 146-22-5, Mogadon 146-48-5, Quebrachin 146-56-5 147-24-0, Diphenhydramine hydrochloride 147-93-3, Thiosalicylic acid 147-94-4 148-24-3, 8-Quinolinol, biological studies 148-72-1, Pilocarpine nitrate 148-79-8, Thiabendazole 149-30-4, 2-Mercaptobenzthiazole 149-91-7, Gallic acid, biological studies 150-69-6 150-76-5, Hydroquinonemonomethyl ether 150-78-7 151-83-7, Methohexital

152-02-3 152-11-4, Isoptin hydrochloride 152-72-7, Sintrom 154-69-8, Pyribenzamine hydrochloride 155-09-9 155-41-9 191-48-0, Diacenaphtho[1,2-j:1',2'-l]fluoranthene 206-44-0, Fluoranthene 217-59-4, Triphenylene 288-32-4, Imidazole, biological studies 288-47-1, Thiazole 298-81-7, Meladinine 298-96-4, Triphenyl tetrazolium chloride 299-39-8 299-42-3 300-48-1 302-70-5, Mitomen 302-79-4, Tretinoin 303-25-3, Cyclizine hydrochloride 303-69-5, Dominal 304-84-7, Etamivan 306-03-6 306-07-0 306-19-4 306-21-8, Paredrine hydrobromide 314-03-4 315-80-0, Dibenzepin hydrochloride 317-34-0 318-98-9, Propranolol hydrochloride 319-89-1, Tetrahydroxyquinone 320-77-4 331-39-5 339-43-5 341-70-8 350-12-9, Sulbentin 357-66-4, Spirilene 360-68-9, Koprosterin 364-62-5, Metoclopramide 365-26-4 382-67-2 389-08-2, Nalidixic acid 390-64-7, Segontin 396-01-0 434-13-9 435-97-2, Marcoumar 439-14-5, Valium 443-48-1, Metronidazole 447-05-2, Pyridoxine phosphate 452-86-8 456-59-7, Cyclandelate 458-24-2, Fenfluramine 466-06-8, Proscillaridin 466-09-1, Uzarigenin 471-47-6, Oxamidic acid 475-25-2, Hematine 477-93-0, Dimethoxanate 479-18-5, Isophyllen 479-27-6, 1,8-Naphthalenediamine 479-92-5 480-68-2 481-06-1, Santonin 481-85-6, 2-Methyl-1,4-naphthohydroquinone 482-05-3, Diphenic acid 482-68-8, Sarpagan-10,17-diol 482-74-6 483-84-1, Flavianic acid 484-11-7, Neocuproin 484-23-1, Nepresol
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IT 485-34-7, Novatophan 486-25-9, Fluorenone 486-67-9, Mersalyl acid 486-79-3, Dipyrocetyl 487-53-6, Oxyprocaine 488-41-5 489-98-5, Picramide 490-79-9, 2,5-Dihydroxybenzoic acid 490-91-5, Thymoquinone 490-98-2, Salicaine 492-22-8, 9H-Thioxanthen-9-one 492-41-1 492-70-6 493-52-7, Methyl Red 493-80-1, Luvistin 495-69-2, Hippuric acid 497-25-6, 2-Oxazolidinone 497-59-6, Meconic acid 497-75-6 498-23-7, Citraconic acid 498-24-8, Mesaconic acid 500-38-9 500-89-0, Thiambutosin 501-52-0, Benzenepropanoic acid 501-65-5, Tolan 501-81-5, 3-Pyridylacetic acid 504-15-4, Orcin 505-48-6, Suberic acid 505-54-4, Hexadecanedioic acid 510-74-7, Spiramide 511-13-7, Detigon 511-46-6, Keithon 512-69-6, Raffinose 515-64-0, Elkosin 515-96-8, Semioxamazide 516-95-0 517-28-2, Hematoxyline 519-05-1, Opianic acid 519-32-4 519-37-9 519-41-5 519-73-3, Triphenyl methane 520-07-0 520-26-3, Hesperidine 521-74-4 522-12-3 522-23-6, Metofenazate difumarate 522-51-0 522-66-7, Hydroquinine 523-21-7 523-87-5 524-42-5, 1,2-Naphthoquinone 525-48-4 526-75-0 527-06-0, D-glycero-D-galacto-Heptitol 528-21-2, Gallacetophenone 530-78-9 532-03-6, Methocarbamol 532-54-7 532-76-3, Hexylcaine hydrochloride 533-06-2 533-10-8 533-63-1, Iodival 533-73-3, 1,2,4-Benzenetriol 534-87-2, Effortil 535-83-1 536-21-0, Norfenefrine 536-33-4, Iridozin 537-12-2 537-26-8 537-45-1 538-02-3, Cyclopentamine hydrochloride 538-24-9, Trilaurin 538-32-9 538-56-7 538-58-9 538-62-5, Diphenylcarbazone 539-08-2 539-09-3, Elbon 539-21-9, Iversal 539-47-9 543-15-7, Heptaminol hydrochloride 547-57-9 547-58-0,

Methylorange 548-00-5, Tromexan 548-35-6 548-57-2, Miracil D 548-73-2, Dehydrobenzperidol 550-70-9, Triprolidine hydrochloride 550-74-3 552-22-7, Thymoliodide 552-46-5, .alpha.-Naphthylamine hydrochloride 552-94-3, Diplosal 553-06-0 553-30-0, Proflavinhemisulfate 554-24-5, Phenobutiodil 554-57-4, Methazolamide 555-28-2, Eucaine hydrochloride 555-30-6, Methyldopa 555-68-0, m-Nitrocinnamic acid 556-50-3 561-20-6 562-09-4, Systral 562-10-7, Doxylamine 569-51-7, Hemimellitic acid 569-59-5 569-61-9, Pararosaniline 571-60-8, 1,4-Naphthalenediol 575-44-0, 1,6-Naphthalenediol 576-68-1, Mannomustin 578-19-8, Diaspirin 578-94-9 579-10-2, Exalgin 579-23-7, Cyclovalone 579-75-9, Salicylic acid methylether 580-16-5, 6-Quinolinol 581-43-1, 2,6-Naphthalenediol 582-17-2, 2,7-Naphthalenediol 588-59-0, Stilbene 590-63-6, Urecholine chloride 594-14-9 599-04-2 603-00-9 603-50-9, Dulcolax 603-52-1, Diphenylurethane 603-63-4, Hypnal 603-64-5 604-75-1, Oxazepam 606-90-6, Piprinhydrinate 607-00-1 608-59-3, Gluconate 608-66-2, Melampyrit 611-36-9, 4-Quinolinol 611-71-2 612-41-9, o-Nitrocinnamic acid 612-52-2 613-03-6 613-12-7 613-31-0, Dihydroanthracene 614-33-5 620-40-6, Tribenzylamine 620-99-5, Holocaine hydrochloride 621-06-7, Phenylacetanilide 621-08-9 621-37-4 621-71-6, Tricaprin 621-82-9, Cinnamic acid, biological studies 622-03-7, Diphenylthiocarbazide 622-64-0 626-64-2, 4-Pyridinol 632-25-7, o-Sulfobenzoic acid 635-41-6, Trimetozin 637-56-9, p-Phenetidine hydrochloride 637-58-1, Tronothane hydrochloride 644-26-8, Stovain 644-62-2 655-05-0, Thozalinone 673-31-4, Phenprobamate 693-23-2, Decamethylenedicarboxylic acid 696-62-8 697-91-6 699-06-9 712-48-1 721-19-7, Methastyridone 729-99-7 738-70-5, Trimethoprim 739-71-9, Trimipramine 742-20-1, Cyclopenthiazide 749-02-0 749-13-3, Trifluperidol 751-94-0 826-39-1, Mecamylamine hydrochloride 830-81-9, 1-Naphthylacetate 840-65-3 841-32-7, Diphenylpropylacetic acid 846-49-1, Lorazepam 846-50-4, Temazepam 848-75-9, Lormetazepam 852-19-7, Sulfapyrazole 853-34-9, Ketophenyl butazone 868-18-8 877-43-0, 2,6-Dimethylquinoline 890-98-2, Mandelic acidbenzylester 891-33-8, Tutocaine 894-71-3, Nortriptyline hydrochloride 897-15-4, Dosulepin hydrochloride 909-39-7, Insidon 910-86-1 912-60-7, Narcotine.hydrochloride 933-67-5, 7-Methylindole 938-25-0, 1,2-Naphthalenediamine 942-46-1, Methylephedrine hydrochloride 943-17-9 953-26-4 956-48-9 957-51-7, Diphenamid 958-93-0, Thenyldiamine hydrochloride 963-39-3, Demoxepam 964-52-3 965-52-6, Nifuroxazide 967-80-6 969-33-5, Cyproheptadine hydrochloride 977-79-7 982-43-4 985-13-7 1007-33-6 1011-54-7, trans-2-Methoxy cinnamic acid 1011-92-3, .alpha.-Cyano-cinnamic acid 1015-89-0, 6(5H)-Phenanthridinone 1021-11-0 1059-28-5, Tussukal 1070-95-7, Guanoctine hydrochloride 1077-28-7, DL-Thioctic acid 1079-71-6, Octahydroanthracene 1082-57-1, Rhinogutt 1083-57-4 1088-92-2 1094-08-2, Profenamine hydrochloride 1098-60-8 1115-70-4, Metformin hydrochloride 1142-42-3 1145-36-4, Felogen 1146-95-8, Gilutensin hydrochloride 1147-56-4,

1-(2-Thiazolylazo)-2-naphthol 1151-11-7, Solu-Biloptin 1155-49-3, Falicain 1156-19-0, Tolazamide 1172-18-5, Flurazepam dihydrochloride 1173-88-2, Stapenor 1176-03-0, Psicaine 1176-08-5, Phenyltoloxamine citrate 1179-69-7, Torecan 1197-18-8, Tranexamic acid 1198-55-6 1199-77-5, .alpha.-Methyl-cinnamic acid 1211-28-5, Katovit 1212-72-2, Mephen-termine sulfate 1215-83-4, Silomat 1218-35-5 1225-55-4 1228-19-9, Glypinamide
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IT 1229-29-4, Doxepin hydrochloride 1229-69-2 1240-15-9, Propiomazine hydrochloride 1248-42-6 1256-01-5, Pasaden 1323-64-4 1391-57-7, Filmaron 1400-62-0, Orcein 1407-14-3, Helenine 1421-86-9, Strychnine hydrochloride 1480-19-9, Fluanisone 1491-41-4, Maretin 1508-27-6 1508-75-4 1508-76-5, Procyclidine hydrochloride 1582-09-8, Trifluraline 1596-70-9 1622-62-4, Flunitrazepam 1622-79-3 1639-60-7 1641-74-3, Nicametate citrate 1642-54-2 1674-48-2 1701-77-5, Methoxy-phenylacetic acid 1722-62-9 1740-22-3, Surexin 1764-85-8, Epithiazide 1786-81-8, Prilocaine hydrochloride 1837-57-6, Rivanol 1841-19-6, Fluspirilene 1847-63-8, Nafoxidine hydrochloride 1867-66-9, Ketamine hydrochloride 1893-33-0 1944-12-3, Fenoterol hydrobromide 1975-50-4, 2-Methyl-3-nitro-benzoic acid 2002-29-1 2043-43-8, Lactamide 2053-26-1, Papaverine sulfate 2062-78-4 2081-65-4 2135-17-3, Flumethason 2139-47-1 2181-22-8 2192-20-3 2210-63-1, Monophenylbutazone 2217-44-9 2218-94-2, Nitron 2243-62-1, 1,5-Naphthalenediamine 2259-96-3, Cyclothiazide 2295-31-0, 2,4-Thiazolidinedione 2307-81-5, Quiloflex 2313-87-3, Ethoxazene hydrochloride 2315-02-8 2321-07-5 2324-94-9 2347-80-0 2348-17-6 2350-32-5, Stadacaine 2398-96-1, Tonoftal 2435-53-2 2444-46-4 2447-57-6, Fanasil 2448-68-2 2451-01-6, Terpinhydrate 2465-59-0, Oxypurinol 2525-09-9 2530-97-4 2572-61-4 2574-78-9 2606-93-1 2608-24-4 2622-26-6, Periciazine 2691-46-5, Spasmo-Paparid 2709-56-0, Flupenthixol 2773-92-4, Quotane hydrochloride 2784-55-6 **2810-69-7** 2825-60-7, Formocortal 2870-71-5, Tropin 2898-12-6, Medazepam 2955-38-6, Prazepam 2961-04-8 2987-16-8 3069-07-6, Tetraacetyl hydrazine 3093-35-4, Halcinonide 3112-31-0, 1H-Pyrazole-3,5-dicarboxylic acid 3115-05-7 3254-89-5, Diphenidol hydrochloride 3269-83-8 3339-11-5, Tolpropamine hydrochloride 3403-42-7, Methopromazine maleate 3413-58-9, Optochin hydrochloride 3416-26-0, Lidoflazine 3453-83-6 3458-28-4, D(+)Mannose 3459-20-9, Redul 3546-03-0 3546-41-6 3605-01-4, Piribedil 3614-30-0 3614-69-5 3615-41-6, Rhamnose 3682-32-4, 2-Nitroso-1-naphthol-4-sulfonic acid 3685-84-5, Meclophenoxate hydrochloride 3688-85-5, Diapamide 3689-50-7, Oxomemazin 3717-88-2 3731-59-7 3735-45-3, Monzal 3735-90-8, Fencarbamide 3759-07-7 3772-76-7, Methofadin 3811-56-1, Surfen 3818-88-0, Tricyclamol chloride 3829-86-5 3871-82-7, Methylperidol hydrochloride 3937-56-2, 1,9-Nonanediol 3963-81-3, Trigemin 4003-94-5, 4-Nitrostilbene 4044-65-9, 1,4-Phenylenediisothiocyanate 4247-16-9,

Methylglutamine 4330-99-8 4394-00-7 4427-56-9, Isothymol 4546-48-9 4551-59-1 4582-18-7, Endomid 4682-36-4 4724-59-8 4839-46-7, 3,3-Dimethylglutaric acid 4991-65-5, Tioxolon 5034-76-4, Indoxole 5041-09-8, Isobutylamine hydrochloride 5076-82-4, Sarcosine anhydride 5144-52-5 5255-68-5 5322-53-2, Oxiperomide 5370-01-4 5416-45-5, Phenyldiphenylcarbamate 5428-54-6, 2-Methyl-5-nitrophenol 5437-38-7, 3-Methyl-2-nitrobenzoic acid 5449-84-3 5536-17-4 5579-13-5 5585-60-4 5588-29-4, Fenmetramide 5588-31-8, Imidoline hydrochloride 5591-29-7, Etafedrine hydrochloride 5591-45-7, Thiothixene 5667-46-9, Dioxyline phosphate 5716-20-1, Vasculat 5870-29-1, Cyclopentolate hydrochloride 5874-97-5 5875-06-9 5936-29-8 5969-39-1 5987-82-6, Novesin 6027-28-7, Hostacaine 6028-35-9 6038-78-4 6056-11-7, Selvigon 6114-26-7, Veritol sulfate 6138-47-2 6153-33-9 6164-87-0, Ronicol 6190-43-8, Helmitol 6192-92-3 6202-05-7, Cyclomethycaine sulfate 6202-23-9, Cyclobenzaprine hydrochloride 6217-24-9 6284-40-8, Meglumin 6411-75-2 6452-71-7 6493-05-6, 3,7-Dimethyl-1-(5-oxohexyl)xanthine 6506-37-2, Nimorazol 6521-30-8 6536-18-1 6556-11-2, Inositol nicotinate 6575-24-2 6673-35-4, Practolol 6700-56-7, Ethoheptazine citrate 6724-53-4, Perhexiline maleate 7008-15-3 7009-43-0 7085-55-4, Troxerutin 7125-73-7, Flumetramide 7195-27-9, Mefrusid 7199-29-3, Cyheptamide 7210-92-6, Tolycaine hydrochloride 7242-04-8, Pentaacetyl gitoxin 7270-12-4, Resotren 7297-25-8 7413-36-7, Nifenalol 7414-95-1 7491-74-9, Piracetam 7517-19-3, L-Leucine methyl ester hydrochloride 7601-55-0, Metubine iodide 8002-89-9 8006-08-4, Ergotoxinine 8015-17-6, Metrotonin 8015-18-7, Veramon 8064-60-6, Primulin 9001-22-3, Emulsin **9002-92-0** 9004-53-9, Dextrin 9005-79-2, Glycogen, biological studies 9005-80-5, Inulin 10040-45-6 10176-39-3 10238-21-8 10347-81-6 10402-53-6 10405-02-4 10539-19-2, Eupaverin 10563-70-9, Melitracen hydrochloride 10592-03-7, Vincamine hydrochloride 11014-59-8, Lanatoside 11024-24-1 12002-15-2, Sapamine 12041-92-8, Hexyltheobromine 12694-25-6, Bi-9H-fluorene 13055-82-8, Reproterol hydrochloride 13422-16-7, Triflocin 13472-79-2 13492-01-8 13523-86-9, Pindolol 13636-10-7 13636-18-5 13665-88-8, Mopidamol 13900-17-9 13977-28-1 14198-59-5 14222-60-7, Ektebin 14255-87-9, Parbendazole 14293-44-8 14516-56-4 14538-56-8, Piperazine phosphate 14543-76-1 14698-29-4, Oxolinic acid 14759-06-9 15307-79-6, Voltaren

(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanism in relation to)

IT 15308-34-6, Novadral hydrochloride 15351-13-0, Nicofuranose 15402-76-3 15537-73-2, Silubin 15585-38-3 15676-16-1, Sulpiride 15687-27-1, Ibuprofen 15825-70-4 15876-67-2 16110-98-8, Phenyl maleic acid 16662-46-7, Gallopamil hydrochloride 16773-42-5, Ornidazole 16994-56-2 17088-72-1 17226-75-4 17273-86-8 17297-82-4 17407-37-3, DL-.alpha.-Tocopherol succinate 17509-71-6 17560-51-9, Metolazone 17692-39-6 17892-25-0 18174-58-8 18559-94-9

18869-73-3, Triacetyl diphenolisatin 19188-90-0 19237-84-4, Prazosin hydrochloride 19311-91-2 19387-91-8, Tinidazole 19562-30-2 19794-93-5, Trazodone 20153-98-4 20231-81-6, Uzarin 20277-92-3, N,N-Diphenyl-guanidine 20380-58-9 20423-87-4 20432-64-8, Iprindole hydrochloride 20455-68-9, Dibenzylamine hydrochloride 20788-07-2, Terenol 20833-93-6 21361-95-5 21498-08-8 21535-47-7, Mianserine hydrochloride 21721-92-6 21738-42-1 21829-25-4, Nifedipine 22059-60-5, Disopyramide phosphate 22071-15-4, Ketoprofen 22089-22-1, Trofosfamide 22204-53-1, Naproxen 22232-55-9, Modatrop 22254-24-6, Ipratropiumbromide 22494-42-4, Diflunisal 22760-18-5 22832-87-7 22888-70-6 23031-32-5, Terbutalinsulfate 23092-17-3, Halazepam 23111-34-4, Feclobuzone 23142-01-0 23239-51-2 23288-49-5, Probucol 23307-02-0 23327-57-3, Nefopam hydrochloride **23488-38-2** 23607-71-8 23694-81-7, Mepindolol 23873-81-6 23983-43-9 24168-96-5 24169-02-6 24324-17-2, 9-Fluorenyl-methanol 24526-64-5, Nomifensin 24561-10-2, Piperocaine hydrochloride 24600-36-0, Fominoben hydrochloride 24815-24-5 25046-79-1, Glisoxepid 25167-82-2 25167-84-4 25498-47-9, Saiodin 25717-80-0 25812-30-0, Gemfibrozil 25953-17-7 26020-55-3 26309-95-5, Pivampicillin hydrochloride 26598-44-7 26718-25-2 26864-56-2, Penfluridol 26921-17-5, Timolol-maleate 26983-52-8, Diphenol 27479-32-9 27848-84-6 28346-70-5, Naphthalenediol 28738-34-3 29094-61-9, Glipizide 29110-48-3 29868-97-1 30440-92-7 30900-94-8 30919-08-5 31329-57-4, Naftidrofuryl 31431-39-7, Mebendazole 31566-31-1, Glycerin monostearate 31793-07-4, Pirprofen 31842-01-0, Indoprofen 31901-98-1, Naphthalenetetracarboxylic acid 32672-69-8 32780-64-6, Labetalol hydrochloride 32972-46-6 33125-97-2, Etomidate 33342-05-1 33396-37-1 33401-94-4, Pyrantel-tartrate 33402-03-8 33996-33-7, Oxaceprol 34183-22-7, Propafenone hydrochloride 34552-84-6, Isoxicam 34661-75-1 35306-33-3 35412-64-7 35604-67-2, Viloxazine hydrochloride 36236-67-6, Meclizine hydrochloride 36282-47-0, Tramadol hydrochloride 36322-90-4, Piroxicam 36637-19-1, Etidocaine hydrochloride 37275-48-2, Dipyridyl 37887-33-5 38096-29-6, Pyridinediamine 38194-50-2, Sulindac 38304-91-5, Minoxidil 38866-78-3 39379-48-1, Reten 39461-53-5, Pyrenedione 39562-70-4 **39568-70-2** 40180-04-9 41100-52-1, Memantine hydrochloride 41247-05-6, DL-Xylose 41340-25-4, Etodolac 41451-91-6, Erythromycine 41587-33-1 41767-29-7, Fluocortinbutyl ester 41838-38-4 41847-77-2 41960-46-7 42200-33-9, Nadolol 43218-56-0 49721-50-8 49746-00-1, Twiston 50322-92-4 50591-64-5 50679-08-8 50832-74-1, Nifurprazine hydrochloride 50838-36-3 50926-65-3, Novalgin-quinine 51481-61-9 51703-77-6 51940-44-4, Pipemidic acid 51996-59-9 52432-72-1, Oxeladin citrate 52441-07-3, Parsol 52468-60-7 52849-55-5, DL-Metipranolol 53179-11-6, Loperamide 53623-34-0 53663-23-3 53783-83-8, Tromantadine 53859-10-2 53885-35-1, Ticlopidine hydrochloride 54024-22-5 54504-70-0 54750-10-6, Isolevin 54767-75-8, Suloctidil 54812-66-7 54965-24-1, Tamoxifen citrate 55031-26-0, Iodoeosine 55268-74-1, Praziquantel 55327-22-5

56050-03-4, Mecloxamine citrate 56392-17-7, Metoprolol tartrate 56601-85-5 57109-90-7 57808-66-9 58934-46-6, Lorcainide hydrochloride 59831-65-1, Halopemide 59954-01-7 60525-15-7 60539-09-5 60607-34-3 61169-36-6 61229-67-2, Bromocresol red 63250-48-6, Piprozoline 64019-93-8 65271-80-9 65277-42-1, Ketoconazole 65431-33-6, Trypaflavine 65923-65-1 66894-06-2 69494-65-1, Migraenin 72762-00-6, 2-Pyridinol 73548-65-9, Veraethyl 74217-46-2 74347-31-2 75507-68-5 77614-18-7 78361-94-1, Naphthoquinoline 81098-57-9 81177-02-8 83943-60-6 98578-19-9 104700-83-6 109893-47-2 139352-30-0, Pergalen 139369-53-2 139369-54-3 139369-55-4 139369-56-5 139369-57-6 139369-58-7, 2H-1-Benzopyran-3,3,4,4,5,7-hexol 139369-59-8 139369-60-1 139369-61-2 139369-62-3 139369-64-5 139369-65-6 139369-66-7 139369-67-8 139369-68-9 139369-70-3 139369-71-4 139411-97-5 139412-02-5 139412-03-6 139412-04-7 139465-28-4, Dipa-Vit B 15 139465-72-8, Nipagin T 139466-02-7, Novanal 139466-06-1, Phenidol 139556-82-4 139984-92-2
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanism in relation to)

IT 50-33-9, Butazolidine, biological studies 50-41-9, Clomiphene citrate 50-48-6, Amitriptylin 50-63-5, Chloroquin diphosphate 50-71-5, Alloxan 50-78-2, Acetyl salicylic acid 50-85-1, m-Cresotinic acid 51-17-2, Benzimidazole 51-35-4, Hydroxyproline 51-55-8, Atropine, biological studies 51-66-1 51-84-3, biological studies 52-90-4, Cysteine, biological studies 54-31-9, Furosemide 54-84-2 54-95-5, Cardiazole 55-56-1, Chlorhexidine 55-98-1, Busulphan 56-40-6, Glycine, biological studies 56-41-7, Alanine, biological studies 56-45-1, Serine, biological studies 56-55-3, Benzanthracene 56-72-4, Coumafos 56-75-7, Chloramphenicol 56-85-9, Glutamine, biological studies 56-87-1, L-Lysine, biological studies 56-89-3, Cystine, biological studies 57-37-4, Benactyzine.hydrochloride 57-67-0, Sulfaguanidine 57-68-1, Sulfamethazine 57-92-1, Streptomycin, biological studies 58-08-2, biological studies 58-15-1 58-33-3, Atosil 58-61-7, Adenosine, biological studies 58-94-6, Chlorthiazide 59-42-7 59-49-4, 2(3H)-Benzoxazolone 60-18-4, L-Tyrosine, biological studies 60-27-5 60-32-2 60-54-8 60-80-0, Antipyrin 61-12-1 61-33-6, Penicillin G, biological studies 61-72-3, Cloxacillin 61-75-6, Bretyliumtosylate 61-90-5, Leucine, biological studies 61-94-9 61-96-1, Corbasil 63-68-3, Methionine, biological studies 63-91-2, Phenylalanine, biological studies 64-77-7, Artosin 64-86-8, Colchicine 64-95-9, Adiphenin 65-45-2, Salicylic acid amide 65-82-7, N-Acetylmethionine 66-81-9 67-03-8, Aneurine hydrochloride 67-52-7, 2,4,6(1H,3H,5H)-Pyrimidinetrione 68-35-9, Sulfadiazin 68-41-7, D-Cycloserine 69-09-0, Chlorpromazine hydrochloride 69-27-2 69-53-4, Ampicillin 70-47-3, Asparagine, biological studies 71-00-1, Histidine, biological studies 72-18-4, Valine, biological studies 72-19-5, Threonine, biological studies 72-48-0, Alizarin 73-22-3, Tryptophane, biological studies 73-24-5, Adenine, biological studies 73-32-5, Isoleucine, biological studies 73-48-3, Benzylrodiuran 74-79-3, L-Arginine,

biological studies 76-22-2 76-29-9 76-60-8, Bromcresolgreen 76-65-3, Amolanone 77-02-1, Allonal 77-36-1 77-46-3, Acedapsone 77-65-6, Adalin 77-91-8 79-05-0, Propanamide 79-57-2, Oxytetracycline 80-03-5 80-05-7, biological studies 80-32-0, Vetisulid 80-77-3, Chlormezanone 80-97-7 81-61-8 81-64-1, Quinizarine 82-05-3, Benzanthrone 82-45-1, 1-Amino-anthraquinone 82-54-2, Cotarnine 82-86-0, 1,2-Acenaphthylenedione 82-93-9 83-32-9, Acenaphthene 83-40-9, o-Cresotinic acid 84-65-1, Anthraquinone 85-18-7 85-73-4, Taleudron 86-42-0 86-54-4 86-74-8, Carbazole 87-08-1 87-32-1, N-Acetyl-DL-tryptophan 87-88-7 88-21-1 89-56-5, p-Cresotinic acid 90-64-2, Amygdalic acid 90-84-6 91-33-8 91-64-5, 2H-1-Benzopyran-2-one 93-08-3 93-10-7, Quinaldinic acid 93-18-5 93-44-7 94-09-7, Benzocaine 94-12-2 94-19-9 94-20-2, Chlorpropamide 94-25-7, Butesine 94-41-7 95-25-0, Chlorzoxazone 95-55-6, o-Aminophenol 95-85-2 96-83-3, Iopanoic acid 97-59-6, Allantoin 98-37-3 98-50-0, Arsanilic acid 99-32-1, Chelidonic acid 99-91-2 101-71-3 102-07-8, Carbanilide 103-12-8, Prontosil 103-32-2, Benzylaniline 103-41-3 103-84-4, N-Acetylaniline 103-89-9 103-90-2 104-06-3, Conteben 105-20-4, Betazole 106-34-3, Quinhydrone 106-51-4, p-Benzoquinone, biological studies 113-92-8, Chlorpheniramine maleate 114-83-0 115-39-9, Brom Phenol Blue 115-51-5, Ambutoniumbromide 115-68-4, Irgamid 118-10-5 118-23-0, Ambodryl 118-75-2, Chloranil, biological studies 118-92-3, o-Aminobenzoic acid 119-53-9, Benzoin 119-61-9, Benzophenone, biological studies 120-32-1 120-34-3, Irgafen 121-25-5, Amprolium 122-11-2, Madribon 122-80-5 124-04-9, Hexanedioic acid, biological studies 125-60-0, Baralgin-Amid 126-07-8 126-43-2 127-69-5, Sulfafurazol 127-79-7, Sulfamerazine 127-81-1, Salthion 130-16-5 130-22-3 131-08-8 131-09-9 132-98-9, Isocillin 134-50-9, 9-Aminoacridine hydrochloride 134-81-6, Benzil 134-85-0 136-95-8, 2-Benzothiazolamine 137-08-6, Calcium-D-pantothenate 138-39-6, Mafenide 139-85-5 141-82-2, Propanedioic acid, biological studies 143-37-3, Ethanimidamide 144-83-2 145-94-8, Chlorindanol 146-56-5 147-24-0, Benadryl 147-55-7, Pheneticillin 147-85-3, Proline, biological studies 148-64-1 148-82-3, Melphalan 149-15-5, Butyn Sulfate 149-64-4 150-13-0, p-Aminobenzoic acid 150-69-6, p-Ethoxyphenylurea 152-47-6 153-61-7, Cefalotin 154-87-0, Cocarboxylase 154-97-2, Contrathion 208-96-8, Acenaphthylene 218-01-9, Chrysene 243-42-5, Benzo[b]naphtho[2,3-d]furan 260-94-6, Acridine 298-46-4, 5H-Dibenz[b,f]azepine-5-carboxamide 298-57-7, Cinnarizine 303-81-1, Novobiocin 305-03-3, Chlorambucil **309-00-2**, Aldrin 313-67-7, Aristolochic acid 315-30-0, Allopurinol 316-41-6, Berberinsulfate 334-48-5, Decanoic acid 346-18-9, Polythiazide 370-81-0 437-74-1 441-38-3 446-86-6, Azathioprine 464-41-5 466-49-9, Aspidospermin 467-22-1, Carbiphene hydrochloride 474-25-9 481-74-3 488-82-4, D-Arabinitol 489-49-6, Cetrarin 497-76-7, Arbutin 498-23-7, Citraconic acid 499-12-7, Aconitic acid 515-64-0, Sulfisomidine

519-87-9, Acetyldiphenylamine 520-77-4, Ethadione 521-74-4, Broxyquinoline 526-08-9, Sulfaphenazole 529-65-7 530-43-8, Chloromycetin palmitate 531-75-9, Aesculin 537-05-3, Acoin 537-92-8 543-24-8, N-Acetylglycine 545-93-7 547-44-4 550-81-2, Amopyroquin
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanisms in relation to)

IT 551-27-9, Propicillin 555-96-4 556-08-1, p-Acetaminobenzoic acid 564-25-0 569-84-6 575-36-0 577-33-3, Anthrarobin 578-66-5, 8-Aminoquinoline 581-97-5 588-68-1 590-46-5, Betaine.hydrochloride 591-07-1, N-Acetylurea 591-08-2, N-Acetylthiourea 599-79-1 599-88-2, Sulfaperin 602-09-5, [1,1'-Binaphthalene]-2,2'-diol 606-04-2 613-78-5, Betol 616-91-1, N-Acetyl-L-cysteine 625-53-6, N-Ethylthiourea 630-55-7, Amphotropin 636-54-4, Clopamide 637-32-1 637-49-0 651-06-9, Bayrena 653-03-2, Butaperazine 655-35-6 671-95-4 703-80-0, 3-Acetylindole 723-46-6 729-99-7 738-66-9, Bis(4-nitrophenyl) carbodiimide 751-97-3, Reverin 768-90-1 768-94-5, Tricyclo[3.3.1.13,7]decan-1-amine 776-34-1 776-75-0, Benzoylpiperidine 795-13-1, Formyl sulfamethin 804-63-7 828-51-3 846-50-4 849-55-8, Buphenin hydrochloride 873-76-7 882-09-7 914-00-1, Methacycline 935-56-8 956-04-7 963-07-5 968-81-0, Acetohexamide 980-71-2 982-24-1, Clopenthixol 992-21-2, Lymecycline 1050-48-2, Benzilonium bromide 1071-93-8 1072-71-5, 2,5-Dimercapto-1,3,4-thiadiazole 1098-50-6, Dansylvaline 1100-21-6, Dansylisoleucine 1100-23-8 1101-68-4, Dansylglutamic acid 1104-36-5, Dansylphenylalanine 1111-06-4 1126-46-1 1126-81-4 1134-47-0, Baclofen 1143-38-0, Cignolin 1145-80-8, N-Carbobenzoxy-L-serine 1163-36-6, Allercur 1188-01-8, DL-Alanyl-glycine 1190-53-0 1215-83-4, Clobutinol hydrochloride 1218-34-4, N-Acetyl-L-tryptophan 1225-60-1, Andantol 1239-94-7, Dansylproline 1248-42-6, Baralgin-Ketone 1249-84-9, Azacosterol.hydrochloride 1260-17-9 1263-03-2 1333-08-0 1397-89-3, Amphotericin B 1398-20-5, Baptisin 1400-61-9, Mycostatin 1401-79-2, Vionactan 1404-26-8, Polymyxin B 1404-88-2, Tyrothricin 1405-97-6, Gramicidin 1477-19-6 1538-09-6 1622-61-3, Clonazepam 1642-81-5 1649-18-9, Azaperone 1684-42-0, Acranil 1798-50-1, Azacyclonol.hydrochloride 1812-30-2 1824-50-6 1824-52-8 1824-58-4 1861-40-1, Benefin 1867-58-9 1915-83-9 1951-25-3 1986-53-4 2016-88-8, Amilorid.hydrochloride 2022-85-7 2043-38-1, Butizid 2058-52-8, Clothiapine 2109-73-1, Butacetin 2134-24-9 2138-22-9 2179-37-5 2350-32-5 2432-99-7 2465-59-0, Alloxanthine 2483-49-0 2508-72-7 2622-30-2, Carphenazine 2667-89-2, Bisbentiamine 2751-09-9, Oleandomycin triacetate 3073-87-8, Dimethyl-Popop 3082-75-5 3274-19-9, 1-Acetylaminoanthraquinone 3287-99-8, Benzylamine hydrochloride 3347-56-6 3483-82-7 3485-62-9 3505-38-2, Carbinoxamine maleate 3521-62-8 3533-97-9 3562-84-3 3624-96-2, Bialamicol hydrochloride 3679-64-9 3684-46-6 3686-68-8, Cornecaine 3876-10-6 3922-90-5, Oleandomycin 4205-90-7, Clonidin 4330-99-8 4361-81-3 4388-82-3, Barbexaclon 4393-72-0 4419-39-0 4845-99-2

4942-47-6, Tricyclo[3.3.1.13,7]decane-1-acetic acid 4985-15-3, Agedal 5068-28-0 5205-82-3, Bevoniummethylsulfate 5251-34-3, Cloprednol 5355-48-6 5490-27-7 5568-90-1, Isopromethazine.hydrochloride 5585-73-9, Butriptyline hydrochloride 5588-20-5 5591-49-1, Anilamate 5667-98-1, Baludon 5786-21-0, Clozapin 5843-82-3 5892-41-1 6011-39-8 6469-93-8, Chlorprothixene hydrochloride 6804-07-5, Carbadox 6933-90-0 7421-40-1 7542-37-2, Paromomycin 7683-59-2, Aludrin 8000-95-1, Caffeine sodium-benzoate 8002-85-5 8044-71-1, Cetrimide 8048-52-0 8059-24-3, Adermine 8068-28-8, Colistimethate sodium 10199-89-0 10268-71-0 10323-20-3, D(-)-Arabinose 12041-72-4, Formo-Cibazol 12246-80-9 13068-66-1 13296-94-1 13461-01-3 13539-59-8 13655-52-2, Alprenolol 13726-85-7 13838-08-9 13900-12-4 13957-27-2 14205-39-1 14252-80-3 14286-84-1 14358-44-2 14414-68-7, Benzidine, hydrochloride 14548-46-0, 4-Benzoyl-pyridine 14976-57-9 15148-80-8, Bupranolol hydrochloride 15301-40-3 15318-45-3 15351-05-0 15686-71-2, Cefalexin 15761-39-4 16862-11-6 17039-58-6, Dansylmethionine 17321-77-6 17344-99-9 17671-51-1 17683-09-9 18109-80-3 18109-81-4 18323-44-9, Sobelin 18500-45-3 19461-29-1 20191-75-7 20448-86-6 21352-09-0 21593-23-7 21898-19-1, Clenbuterol.hydrochloride 22131-79-9 22198-72-7 22199-46-8 22316-47-8, Clobazam 22457-89-2 23067-13-2 23110-15-8 23828-92-4, Ambroxol.hydrochloride 23964-57-0 25122-57-0, Clobetasone butyrate 25161-41-5, Acevaltrate 27043-22-7, Ethoxybenzamide 27195-22-8 27323-18-8 27941-88-4 28217-22-3 28217-24-5 28805-76-7, Aminobutyric acid 28860-95-9 28981-97-7 29022-11-5 29122-68-7, Atenolol 29546-59-6 30408-30-1, Nybomycin 30578-37-1 30964-13-7 31135-62-3, Quinolinamine 31677-93-7 32442-99-2
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanisms in relation to)

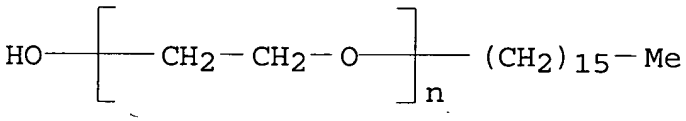
IT 32795-47-4, Alival 32862-97-8 32988-50-4, Viomycin 33386-08-2, Buspirone hydrochloride 33817-20-8, Pivampicillin 35021-10-4 35021-12-6, Dansylserine 35021-16-0, Dansylthreonine 35026-16-5, Dansylhydroxyproline 35408-57-2 35661-40-6 35661-60-0 35737-10-1 35737-15-6 36413-60-2 36653-82-4, 1-Hexadecanol 37517-30-9, Acebutolol 41372-20-7 41451-91-6, Erythromycine 51264-14-3 51333-22-3 51481-61-9 51781-21-6 53164-05-9, Acemetacin 53716-49-7 54118-66-0 57470-78-7, Celiprolol hydrochloride 57775-29-8, Carazolol 62571-86-2, Captopril 63460-06-0 63661-61-0 65571-68-8 68858-20-8 71135-23-4 71989-16-7 71989-23-6 71989-28-1 71989-31-6 73724-45-5 73731-37-0 75364-47-5 81207-65-0 87980-20-9 91000-69-0 91394-66-0 92954-90-0 99103-36-3 104993-76-2 106323-02-8 116611-64-4 118477-74-0, Anthron 121343-82-6 125385-14-0, Acyclidine 139369-44-1 139369-45-2 139369-47-4 139369-49-6 139369-50-9 139369-51-0 139369-52-1 139390-98-0 139406-80-7 139411-94-2 139424-41-2 139465-03-5, Adonit M
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-**reaction** mechanisms in relation to)

L71 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1988:575672 Document No. 109:175672 Borohydride, micellar, and exciplex-enhanced dechlorination of chlorobiphenyls. Epling, Gary A.; Florio, Emily M.; Bourque, Andre J.; Qian, Xhi Hong; Stuart, James D. (Dep. Chem., Univ. Connecticut, Storrs, CT, 06268, USA). Environmental Science and Technology, 22(8), 952-6 (English) 1988. CODEN: ESTHAG. ISSN: 0013-936X.

AB The photodechlorination of polychlorinated biphenyls (PCB's) was studied in the presence of NaBH4, detergents, and exciplex-forming additives. In a family of 13 representative PCB's, these additives generally led to a dramatically increased rate of photodegrdn. Further, the products of photoreaction in the presence of NaBH4 are more cleanly the simple dechlorinated aroms., with fewer side **reactions** than obsd. with ordinary photolysis.

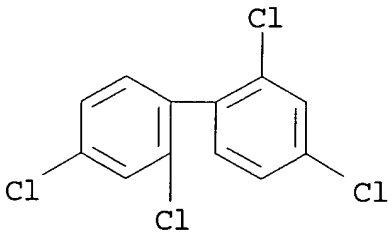
IT **9004-95-9**, Brij 58
(catalysts, for photochem. dechlorination of chlorinated biphenyls, waste treatment in relation to)

RN 9004-95-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

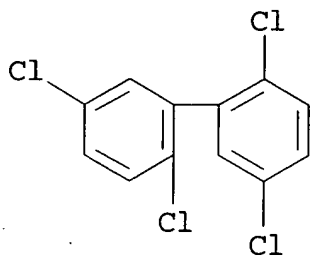


IT **2437-79-8 35693-99-3**, 2,5,2',5'-Tetrachlorobiphenyl
(photochem. dechlorination of, sodium borohydride- and detergent- and exciplex-enhanced, waste treatment in relation to)

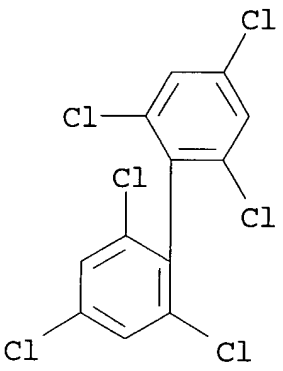
RN 2437-79-8 HCAPLUS
CN 1,1'-Biphenyl, 2,2',4,4'-tetrachloro- (9CI) (CA INDEX NAME)



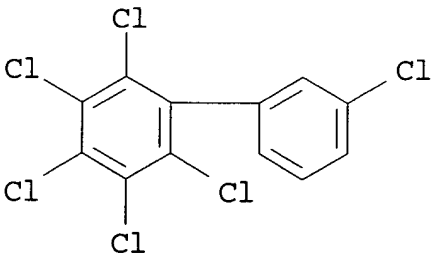
RN 35693-99-3 HCAPLUS
CN 1,1'-Biphenyl, 2,2',5,5'-tetrachloro- (9CI) (CA INDEX NAME)



IT **33979-03-2**, 2,4,6,2',4',6'-Hexachlorobiphenyl
41411-62-5
(photochem. dechlorination of, sodium borohydride- and detergent-enhanced, waste treatment in relation to)
RN 33979-03-2 HCAPLUS
CN 1,1'-Biphenyl, 2,2',4,4',6,6'-hexachloro- (9CI) (CA INDEX NAME)

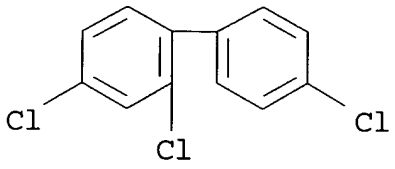


RN 41411-62-5 HCAPLUS
CN 1,1'-Biphenyl, 2,3,3',4,5,6-hexachloro- (9CI) (CA INDEX NAME)

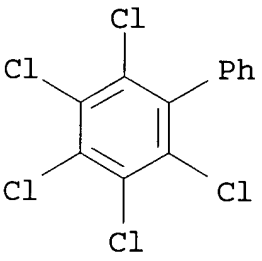


IT **7012-37-5**, 2,4,4'-Trichlorobiphenyl **18259-05-7**, 2,3,4,5,6-Pentachlorobiphenyl **38444-81-4**, 2,5,3'-Trichlorobiphenyl
(photochem. dechlorination of, sodium borohydride- and exciplex-enhanced, waste treatment in relation to)

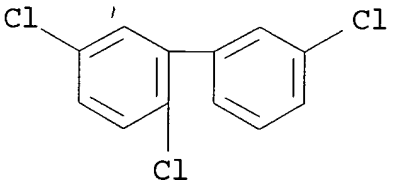
RN 7012-37-5 HCAPLUS
CN 1,1'-Biphenyl, 2,4,4'-trichloro- (9CI) (CA INDEX NAME)



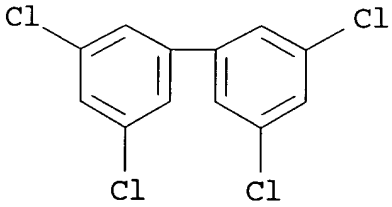
RN 18259-05-7 HCAPLUS
CN 1,1'-Biphenyl, 2,3,4,5,6-pentachloro- (9CI) (CA INDEX NAME)



RN 38444-81-4 HCAPLUS
CN 1,1'-Biphenyl, 2,3',5-trichloro- (9CI) (CA INDEX NAME)



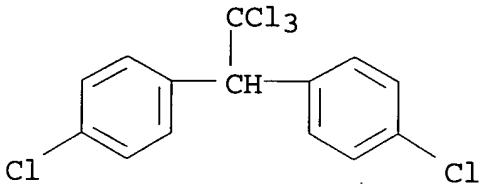
IT **33284-52-5**, 3,5,3',5'-Tetrachlorobiphenyl
(photochem. dechlorination of, sodium borohydride-enhanced, waste treatment in relation to)
RN 33284-52-5 HCAPLUS
CN 1,1'-Biphenyl, 3,3',5,5'-tetrachloro- (9CI) (CA INDEX NAME)



CC 60-4 (Waste Treatment and Disposal)
IT 121-44-8, Triethylamine, uses and miscellaneous 544-40-1, Dibutyl sulfide 577-11-7, Sodium dioctyl sulfosuccinate 626-17-5, 1,3-Dicyanobenzene 1322-36-7, Dodecanethiol **9004-95-9**, Brij 58 16940-66-2, Sodium borohydride
(catalysts, for photochem. dechlorination of chlorinated biphenyls, waste treatment in relation to)
IT 92-52-4D, Biphenyl, chloro derivs. 2050-68-2, 4,4'-Dichlorobiphenyl 2051-60-7, 2-Chlorobiphenyl 2051-62-9, 4-Chlorobiphenyl **2437-79-8 35693-99-3**, 2,5,2',5'-Tetrachlorobiphenyl
(photochem. dechlorination of, sodium borohydride- and detergent- and exciplex-enhanced, waste treatment in relation to)
IT **33979-03-2**, 2,4,6,2',4',6'-Hexachlorobiphenyl **41411-62-5**
(photochem. dechlorination of, sodium borohydride- and detergent-enhanced, waste treatment in relation to)
IT 2051-61-8, 3-Chlorobiphenyl **7012-37-5**, 2,4,4'-Trichlorobiphenyl **18259-05-7**, 2,3,4,5,6-Pentachlorobiphenyl **38444-81-4**, 2,5,3'-Trichlorobiphenyl
(photochem. dechlorination of, sodium borohydride- and exciplex-enhanced, waste treatment in relation to)
IT **33284-52-5**, 3,5,3',5'-Tetrachlorobiphenyl 34883-41-5, 3,5-Dichlorobiphenyl
(photochem. dechlorination of, sodium borohydride-enhanced, waste treatment in relation to)

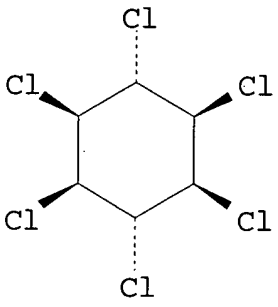
L71 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1987:182155 Document No. 106:182155 Process for the decomposition and decontamination of organic substances and halogenated toxic materials. Tundo, Pietro (Sea Marconi Technologies S.p.A., Italy). U.S. US 4632742 A 19861230, 13 pp. Cont.-in-part of U.S. Ser. No. 517,781, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1985-711404 19850313. PRIORITY: IT 1983-19992 19830310; US 1983-517781 19830727.
AB Haloorg. compds. are **reacted** in the absence of O with a reagent consisting of .gtoreq.1 of a polyethylene glycol, Nixolen, and alc., or a polyhydroxy compd.; a weak base; and an oxidizing agent or radical source. The method is used to decontaminate and recover contaminated industrial oil or decontaminate soil and surfaces contaminated by .gtoreq.1 polyhalogenated org. compd. Transformer oil contg. 20,000 ppm PCB was heated at 85.degree., carbowax 6000 2.0, K2CO3 0.5, and Na2O2 0.2 g were added with stirring for 3 h, the mixt. was cooled, and a clear portion was dild. with n-hexane and analyzed. The residual PCB concn. was 95 ppm.
IT **50-29-3**, biological studies **58-89-9**, Hexachlorocyclohexane
(decompn. of, in oils and soils, compns. for)
RN 50-29-3 HCAPLUS
CN Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- (9CI) (CA

INDEX NAME)

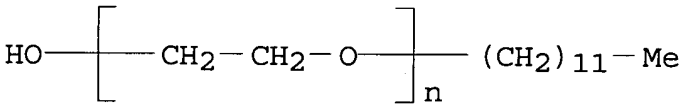


RN 58-89-9 HCAPLUS
CN Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **9002-92-0**
(haloorg. contaminant decompn. with compns. contg.)
RN 9002-92-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-dodecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM B01J019-08
ICS B01J019-10; B01J019-12
NCL 204158210
CC 60-6 (Waste Treatment and Disposal)
Section cross-reference(s): 19, 51
ST chloroorg contaminated oil **reactive** decontamination; chlorodibenzodioxin contaminated oil treatment; PCB contaminated oil treatment; soil haloorg contaminated treatment compn; chlorodibenzofuran decompn polyethylene glycol compn; Nixolen comp decompn haloorg contaminant; alc comp decompn haloorg contaminant
IT **50-29-3**, biological studies **58-89-9**,

Hexachlorocyclohexane 71-43-2D, Benzene, chloro derivs. 92-52-4D, Biphenyl, chloro derivs. 108-95-2D, Phenol, chloro derivs. 132-64-9D, Dibenzofuran, chloro derivs. 143-50-0 262-12-4D, chloro derivs. 1746-01-6, 2,3,7,8-Tetrachlorodibenzo-p-dioxin
(decompn. of, in oils and soils, compns. for)

IT 78-67-1 112-60-7, Tetraethylene glycol 124-41-4, Sodium methoxide 463-79-6D, Carbonic acid, alkali and alk. earth salts 497-19-8, Disodium carbonate, uses and miscellaneous 584-08-7, Dipotassium carbonate 865-47-4 1304-29-6, Barium peroxide 1313-60-6, Sodium peroxide **9002-92-0** 9003-11-6 25322-68-3, Carbowax 6000 144-55-8, Sodium bicarbonate, uses and miscellaneous
(haloorg. contaminant decompn. with compns. contg.)

L71 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2002 ACS

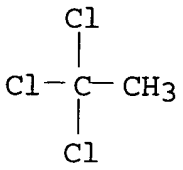
1987:121884 Document No. 106:121884 Purification of dry cleaning solvents with cation exchange-active silicate filter aids. Gruenewaelder, Werner; Schaefer, Margarete; Wichelhaus, Winfried; Von Rybinski, Wolfgang (Henkel K.-G.a.A., Fed. Rep. Ger.). Ger. Offen. DE 3522932 A1 19870108, 7 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1985-3522932 19850627.

AB Used drycleaning solvents are purified with the help of a natural and/or synthetic silicate filter aid with a cation exchange capacity > 30 mequiv/100 g silicate modified with 5-60% .gtoreq.1 R1R2R3R4N+X- (R1-R4 = H, alkyl, alkenyl; X- = water sol. acid anion with dissocn. const. >10-5), and with a settling or cartridge filter contg. a modified silicate layer alone or in combination with kieselguhr and/or activated charcoal. A stirred **reactor** was charged with 500 g Laponite RD and 10 L H2O, heated to 60.degree. with formation of a thixotropic gel, 425 g Dehyquart LT (lauryltrimethylammonium chloride) added, and the mixt. allowed to stand for 30 min after stirring. The org.-modified Hecetorite was filtered, washed with 2 L H2O, and dried at 75.degree.. The product had a C content of 17.3%, contg. .apprx.27% lauryltrimethylammonium chloride. A trichlorotrifluoroethane drycleaning solvent, contg. 5 g/L sebum fatty acids, and 7 g/L of a cleaning enhancer mixt. contg. 40% Na dodecylbenzene sulfonate, and K petroleum sulfonate 10, iso-PrOH 10, spindle oil 20, and H2O 20 g was pumped through a filter aid mixt. contg. 60% activated charcoal, and 40% modified silicate. The filtered solvent contained sebum fatty acids 1, cleaning enhancer 0, and solids content 1.0 g/L, vs. 4, 5, and 7.5, resp., for control filter aid mixt. contg. unmodified Hectorite.

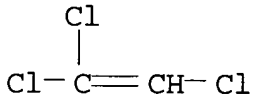
IT **71-55-6P**, 1,1,1-Trichloroethane **79-01-6P**, Trichloroethylene, preparation
(purifn. of, quaternary ammonium compd.-modified silicate filter aids for)

RN 71-55-6 HCAPLUS

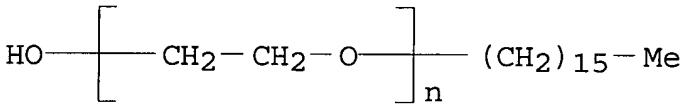
CN Ethane, 1,1,1-trichloro- (8CI, 9CI) (CA INDEX NAME)



RN 79-01-6 HCAPLUS
CN Ethene, trichloro- (9CI) (CA INDEX NAME)



IT **9004-95-9**, Polyethylene glycol monocetyl ether
(removal of, from used drycleaning solvents, quaternary ammonium compd.-modified silicate filter aids for)
RN 9004-95-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM D06L001-10
ICS B01J020-18; C01B033-20
CC 46-5 (Surface Active Agents and Detergents)
Section cross-reference(s): 23
IT **71-55-6P**, 1,1,1-Trichloroethane **79-01-6P**, Trichloroethylene, preparation
(purifn. of, quaternary ammonium compd.-modified silicate filter aids for)
IT 107-21-1, Ethylene glycol, uses and miscellaneous 111-76-2, Butyl glycol **9004-95-9**, Polyethylene glycol monocetyl ether 9016-45-9, Polyethylene glycol monononylphenol ether 27323-41-7
(removal of, from used drycleaning solvents, quaternary ammonium compd.-modified silicate filter aids for)

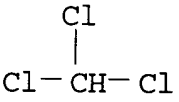
L71 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1986:63765 Document No. 104:63765 Peroxide removal from organic solvents and vegetable oils. Shertzer, Howard G.; Tabor, M. Wilson (Med. Cent., Univ. Cincinnati, Cincinnati, OH, 45267-0056, USA). Journal of Environmental Science and Health, Part A: Environmental Science and Engineering, A20(8), 845-55 (English) 1985. CODEN: JESEDU. ISSN: 0360-1226.
AB Straight-forward procedures for the testing and removal and(or)

prevention of formation of peroxides in org. solvents and vegetable oils were investigated. Total peroxides were assayed by measuring Fe(SCN)3 formed by Fe2+ oxidn. and **reaction** with KSCN. Most solvents and reagents, as received from the manufacturer, had low levels of peroxides. After opening the container, peroxides were formed rapidly in many solvents. Techniques for the complete retardation of peroxide formation in fresh solvents or reagents are described. For peroxides already present in org. solvents or vegetable oils, a novel technique (employing FeSO4 or ferrous-Dowex) for easy removal without introducing contaminants is described.

IT **67-66-3**, biological studies **56939-70-9**
(peroxides of, removal in relation to)

RN 67-66-3 HCAPLUS

CN Methane, trichloro- (9CI) (CA INDEX NAME)



RN 56939-70-9 HCAPLUS

CC 4-3 (Toxicology)

IT 50-00-0, biological studies 56-23-5, biological studies 57-55-6, biological studies 60-29-7, biological studies 64-17-5, biological studies 67-56-1, biological studies 67-63-0, biological studies 67-64-1, biological studies **67-66-3**, biological studies 67-68-5, biological studies 71-23-8, biological studies 71-36-3, biological studies 71-41-0, biological studies 71-43-2, biological studies 75-05-8, biological studies 75-09-2, biological studies 75-65-0, biological studies 98-06-6 108-86-1, biological studies 108-90-7, biological studies 109-66-0, biological studies 109-86-4 109-99-9, biological studies 110-54-3, biological studies 110-82-7, biological studies 111-65-9, biological studies 112-40-3 123-51-3 123-54-6, biological studies 141-78-6, biological studies 538-23-8 1330-20-7, biological studies 7732-18-5, biological studies 9002-93-1 9004-98-2 9005-65-6 9005-66-7 **56939-70-9**
(peroxides of, removal in relation to)

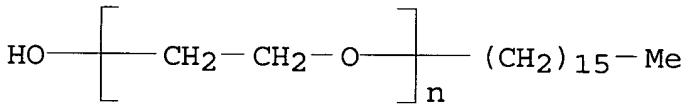
L71 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2002 ACS

1981:79364 Document No. 94:79364 The principles of enzyme stabilization. VI. Catalysis by water-soluble enzymes entrapped into reversed micelles of surfactants in organic solvents. Martinek, Karel; Levashov, A. V.; Klyachko, N. L.; Pantin, V. I.; Berezin, I. V. (Chem. Dep., Moscow State Univ., Moscow, 117234, USSR). Biochimica et Biophysica Acta, 657(1), 277-94 (English) 1981. CODEN: BBACAQ. ISSN: 0006-3002.

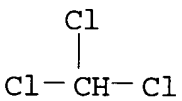
AB The possibility of stabilizing water-sol. enzymes against the inactivating action of org. solvents by means of surfactants was studied. Several enzymes [chymotrypsin (EC 3.4.21.1), trypsin (EC

3.4.21.4), inorg. pyrophosphatase (EC 3.6.1.1), peroxidase (EC 1.11.1.7), lactate dehydrogenase (EC 1.1.1.27), and pyruvate kinase (EC 2.7.1.40)] were used to demonstrate that enzymes can be entrapped into reverse micelles formed by surfactants (Aerosol OT, cetyltrimethylammonium bromide, Brij 56) in an org. solvent (benzene, CHCl3, octane, cyclohexane). The enzymes solubilized in this way retain their catalytic activity and substrate specificity. A kinetic theory was proposed that describes enzymic **reactions** occurring in a micelle-solvent pseudobiphasic system. In terms of this theory, an explanation is given for the exptl. dependence of the Michaelis-Menten equation parameters on the concns. of the components of a medium (water, org. solvent, surfactant) and also on the combination of the signs of charges in the substrate mol. and at the interphase (++,+-,--). The results obtained may prove important for applications of enzymes in org. synthesis and for studying the state and role of water in the structure of biomembranes and active sites of enzymes.

IT **9004-95-9**
(reverse micelles of, in org. solvents, enzyme entrapment in)
RN 9004-95-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **67-66-3**, biological studies
(surfactant reverse micelles in, enzyme entrapment in)
RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)

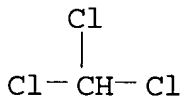


CC 7-13 (Enzymes)
IT 5800-34-0
(**reaction** of, with chymotrypsin entrapped in reverse micelles, kinetics of)
IT 911-76-2
(**reaction** of, with trypsin entrapped in reverse micelles, kinetics of)
IT 57-09-0 577-11-7 **9004-95-9**
(reverse micelles of, in org. solvents, enzyme entrapment in)
IT **67-66-3**, biological studies 71-43-2, biological studies 110-82-7, biological studies 111-65-9, biological studies
(surfactant reverse micelles in, enzyme entrapment in)

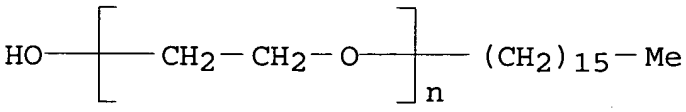
L71 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2002 ACS
1980:491082 Document No. 93:91082 Catalysis by water-soluble enzymes incorporated into reversed surfactant micelles in nonaqueous solvents. Levashov, A. V.; Klyachko, N. L.; Pantin, V. I.; Khmel'nitskii, Yu. L.; Martinek, K. (M. V. Lomonosov State Univ., Moscow, USSR). Bioorganicheskaya Khimiya, 6(6), 929-43 (Russian) 1980. CODEN: BIKHD7. ISSN: 0132-3423.

AB Water-sol. enzyme stabilization with surfactants against the inactivation induced by org. solvents was studied. .alpha.-Chymotrypsin, trypsin, pyrophosphatase, lactate dehydrogenase, pyruvate kinase, and peroxidase were incorporated into reversed micelles formed by surfactants (Aerosol OT, cetyltrimethylammonium bromide, Brij-56) in org. solvents (benzene, CHCl3, octane, cyclohexane). Solubilized enzymes retained their catalytic activity and substrate specificity. A kinetic theory of enzyme **reactions** in the pseudo-biphasic micelle-solvent system was proposed. Anal. of the obsd. dependence of Km values on concns. of the medium components (water, org. solvent, surfactant) and on the ratio of the charge signs both in the substrate mol. and at the interface (++, +-, --) was carried out. The results obtained can be of value for enzyme application in org. synthesis and for elucidating the state and role of water incorporated into biomembranes and enzyme active centers.

IT **67-66-3**, biological studies
(enzymes incorporated in reversed surfactant micelles in, activity of)
RN 67-66-3 HCAPLUS
CN Methane, trichloro- (9CI) (CA INDEX NAME)



IT **9004-95-9**
(reverse micelles of, in org. solvents, enzymes incorporated in, activity of)
RN 9004-95-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)



CC 7-13 (Enzymes)
IT **67-66-3**, biological studies 71-43-2, biological studies 110-82-7, biological studies 111-65-9, biological studies

(enzymes incorporated in reversed surfactant micelles in, activity of)

IT 57-09-0 577-11-7 **9004-95-9**
(reverse micelles of, in org. solvents, enzymes incorporated in, activity of)

L71 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2002 ACS

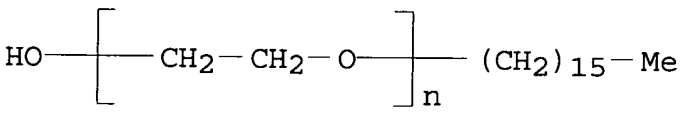
1967:18062 Document No. 66:18062 The elimination of pesticide residues on apricots by washing before canning. Viel, Guy; Hascoet, M.; Dubroca, G. (Lab. Phytopharm., Inst. Natl. Rech. Agron, Versailles, Fr.). Phytiatr.-Phytopharm., 15(1), 41-8 (French) 1966. CODEN: PHPHA6.

AB Several detergents were tried for the elimination of S on apricots. The effect of the washings was assessed by the use of 35S. About 60 treated apricots were soaked in 10 l. H2O or soln., brushed mech. for 2 min., and rinsed for 30 sec. by spraying. Half of the lot was analyzed immediately, the other half was canned to study eventual corrosion control. The washing treatments consisted of (A) H2O (control), (B) H2O and 0.002% dodecylbenzenesulfonate, (C) H2O and 0.0125% oxyethylenated oleocetyl alc. (I) (D) H2O and 0.05% oxyethylenated sucrose tallow acid esters (II) and (E) H2O with a mixt. of 0.03% I and 0.02% II. Unwashed apricots contained 120-30 mg. S/kg. Compared to the control treatment, the S content was reduced to 5.1% by B, to 17% by C, to 18% by D, and to 14% by E. Treatment D was preferred, as the detergent was biodegradable. Treatment C was also tried on apricots treated with DDT or with carbaryl. A H2O washing reduced DDT content by 18% and carbaryl by 75%, but C reduced DDT by 28.5% and carbaryl by 83.5%.

IT **9004-95-9 32054-77-6**
(pesticide removal from apricots by polyethylene glycol 9-octadecenyl ether and)

RN 9004-95-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hexadecyl-.omega.-hydroxy- (9CI) (CA INDEX NAME)

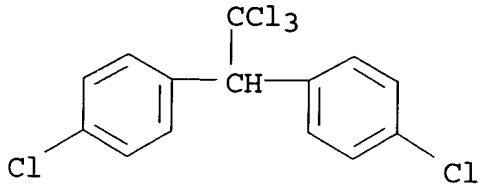


RN 32054-77-6 HCAPLUS

IT **50-29-3**, biological studies
(residues of, removal from apricots by washing)

RN 50-29-3 HCAPLUS

CN Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- (9CI) (CA INDEX NAME)



CC 17 (Foods)
IT Tallow
(fatty acids of, esters with sucrose, **reaction** products with ethylene oxide, pesticide removal from apricots by)
IT Sucrose, esters with tallow fatty acids
(**reaction** products with ethylene oxide, pesticide removal from apricots by)
IT Ethylene oxide
Ethylene oxide
(**reaction** products with tallow fatty acid esters with sucrose, pesticide removal from apricots by)
IT **9004-95-9 32054-77-6**
(pesticide removal from apricots by polyethylene glycol 9-octadecenyl ether and)
IT **50-29-3**, biological studies 63-25-2
(residues of, removal from apricots by washing)